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Massachusetts Department of Revenue Division of Local Services

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Brockton School District

Executive Order 393

*Education Management Accountability Board Report
January 1998*

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I. INTRODUCTION

The Education Reform Act of 1993 has two major goals: to achieve adequate funding for all local and regional school districts over a seven-year period; and to bring equity to local taxation effort based on a community's ability to pay. In February 1997, Governor Weld issued Executive Order 393 to evaluate the education reform program that was nearing the end of its fourth year. Beginning in FY98, Chapter 70 state aid for education will reach \$2.288 billion. With an investment of this magnitude in the Commonwealth's schools it is critical to "review, investigate and report on the expenditures of funds by school districts, including regional school districts, consistent with the goals of improving student achievement." To that end, Executive Order 393 established an Educational Management Accountability Board (EMAB).

The Secretary of Administration and Finance, serving as chief of staff to the EMAB, put together a team of auditors from the Department of Revenue's Division of Local Services to conduct the school district reviews. DOR's Director of Accounts is the chief investigator with authority to examine department accounts and transactions (M.G.L. Ch. 44, Secs. 45 and 46A). The reviews are being conducted in consultation with the State Auditor and the Commissioner of Education.

Brockton is the second school district to be reviewed under Executive Order 393. Brockton municipal and school officials cooperated fully with the review team. Three DOR auditors conducted the field review of the Brockton School District (BSD) in August and September 1997. Included in this review was a confidential survey sent to employees of the school district.

II. EXECUTIVE SUMMARY

Findings

The following paragraphs include some of the more significant findings of the Brockton School District review. When possible, the review team has identified and presented best practices so that they can be adopted by other school districts. Financial or reporting deficiencies were noted. The "General Findings and Conditions" section as referenced contains a more detailed analysis of the results and deficiencies discussed in this section.

The Brockton Public Schools have utilized increased education reform funding to address issues of class size and increased student enrollment; reinstitute programs; enhance instruction; expand professional development opportunities; update textbooks, library and instructional materials; and to provide the necessary learning environment by improving facilities to the extent possible.

The findings are grouped into several broad categories which are addressed in the Education Reform Act: The Foundation Budget, Student Achievement, Governance and Management Powers, Teacher/Student Staffing, Teacher Compensation, Professional Development, and Time and Learning.



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THE FOUNDATION BUDGET

- Brockton is meeting its basic overall financial obligations established by the DOE. In fact, Brockton has exceeded its required net school spending requirements by a small percentage for FY94 through FY97. The increase has been funded through additional state aid. Since FY93 the district has received \$210.7 million, in increasing increments of \$41 million to \$65.9 million, as a result of the state's investment in education reform. The city's share of total net school spending has been declining since 1994. Taking inflation into account, the BSD has seen real budget increases between FY89 and FY97. [See sections 3 and 5]
- The foundation budget did not mandate spending in any specific category as it sought to provide local communities the latitude to address local needs. However, in order to encourage appropriate levels of spending, M.G.L. Ch. 70 Sec. 9 requires that a school district report to the Commissioner of Education when it has failed to spend the amounts incorporated in the foundation budget for four categories: professional development, textbooks, after school activities ("extended programming") and extraordinary maintenance. In FY96, Brockton spent only 31% of the target for professional development, 108% for textbooks, and 0% for both after school programs and extraordinary maintenance. [See section 7 and Appendix B]. For FY94-FY96 the district has not filed any report with the Commissioner's office, nor did the Commissioner's office inform the district of such a requirement or request such a report. Finally although Brockton's school expenditures have increased since implementation of Education Reform, many foundation budget categories are below prescribed foundation levels.
- Brockton's increased funding has also been used to fund substantial increases in special education. [See sections 7, *Chart 22* and Appendix B] The fact that BSD has the ability to provide programs for SPED students within its own system has kept costs from going up even more substantially. The significant increase in special education costs and its concomitant impact on other school programs has been noted in reports by the Massachusetts Taxpayers Foundation, the Foundation Budget Review Commission, the Massachusetts Association of School Superintendents and the recent legislative Commission on Special Education. Although Brockton has allocated an increasing proportion of its budget to special education, it is still below foundation budget in Special Needs Tuition
- The school department and the city of Brockton have no accounting system in place to account for, or control, fixed assets. Other than the expenditures, there is no accounting for the fixed assets. [See section 21B]

STUDENT ACHIEVEMENT

- An objective analysis of the Massachusetts Educational Assessment Program (MEAP), the state's educational testing program from 1988-96, shows that Brockton's scores are mixed for grades four, eight, and ten. The scaled scores for fourth grade reading have remained stable showing no improvement across the five administrations of the test; the scaled score performance for eighth graders has decreased in all subject areas over this same period and the scaled scores for tenth graders are mixed. [See section 15 and Appendix D].

GOVERNANCE AND MANAGEMENT POWERS

- Each of the principals in Brockton was given a raise based upon a ratio of the teacher salary scale, indicating that performance may not be heavily considered in compensation decisions. [See section 16] The Education Reform Act removed principals from collective bargaining units in order to give superintendents more leverage in motivating the performance of principals. This new management tool which was given to superintendents to facilitate school-based improvement does not appear to have been utilized in Brockton.

TEACHER/STUDENT STAFFING

- Brockton has used the increased investment to bring staff back to levels similar to those of the late 1980's. The new funding resulted in a decline in the student-teacher ratio which is a positive trend for educational achievement and an appropriate use of the education reform funds. [See section 9]

TEACHER COMPENSATION

- From FY93 to FY96, the expenditure for teacher salaries rose 29.8% reflecting new staff as well as raises in the teachers' contract. The average teacher's salary rose slightly more than 11% in the period from FY94 to FY96, faster than the inflation rate of 7.5%. By the end of this period, the expenditure for teacher salaries had increased from 42.6% of the school budget to 58.5%. While these expenditure levels are not extraordinary or unusual, the rate of increase of these salaries is faster than the rate of increase in the total school budget, putting pressure on other accounts in the school budget. [See section 9]

PROFESSIONAL DEVELOPMENT

- The Brockton School District has a professional development program that was furnished to the DOE in 1995. For the current school year the BSD has redefined the position of Administrative Assistant for Curriculum and Staff Development. The Assistant has developed intricate sign off procedures for professional development reimbursement. As noted in the survey, 32% of the respondents felt that there were deficiencies in the professional development program. [See section 10]

TIME AND LEARNING

- The BSD developed a time and learning plan and negotiated with the Brockton Education Association. In September, 1997, a compensatory adjustment of 3.7% was added to all teacher salaries along with the negotiated salary increase of 3% . The 3.7% adjustment amounted to approximately \$2.1 million for teachers, paraprofessionals and nurses. [See section 12]

DISTRICT ISSUES

- The Board of Education approved Brockton's voluntary desegregation and educational equity plan. It has been in place since April 1995. The plan features an assignment plan that provides parents with school choice, promotes racial balance in the district's schools, and provides mechanisms and processes for individual school improvement, parent information, and increasing staff diversity. As a voluntary desegregating community the City of Brockton is eligible for 90% reimbursement of its school capital projects. [See Superintendents Report]
- The district also completed an extensive school building plan for the elementary program which was approved by the Board of Education. [See Superintendents Report]
- The BSD is the only school system in the Commonwealth that maintains an armed special school police force. The eight armed full time police officers have full powers of arrest. School expenditures for the force cover all areas of police operations including the purchase of Glock 22, 40 caliber handguns with hollow point bullets for ammunition. [see section 17]
- The BSD signed two real estate leases without utilizing the bid process, advertising, or the central register listing as required by M.G.L. Ch. 30B, Sec. 16. There was no school committee vote or review by the City of Brockton Chief Financial Officer. Subsequently, the Inspector General determined the leases to be invalid and new leases were signed utilizing proper procedures. [see section 17]

Background

Brockton is a large city south of Boston. Like most Massachusetts school districts, BSD faced significant budget reductions in the early 1990s as a result of the economic recession. State aid for education, as well as municipal contributions to schools, declined. Consequently, the BSD experienced a decrease in the number of teachers and the reduction or elimination of certain educational programs. These cuts were somewhat minimized by EEO and emergency aid grants.

Since 1993, the BSD has utilized increased Education Reform Act of 1993 funding to address issues of class size and increasing student enrollment; reinstitute programs; enhance instruction;

expand professional development opportunities; update textbooks, library and instructional materials; and to provide the necessary learning environment by improving facilities to the extent possible.

The BSD created school councils, developed improvement plans, addressed time and learning issues and enhanced their professional development program. The BSD filled all of the 138 teaching positions cut between FY89 and FY93. School administrators state that they generally await specific academic guidelines from the Department of Education (DOE) to improve course content and to set academic achievement goals.

From the financial perspective of education reform, Brockton has met its net school spending requirement annually. Although they were below foundation budget for FY94 through FY97, Brockton exceeded its required local school contribution in FY94 through FY96. In FY97 BSD was slightly below required local school contribution. Clearly, Brockton schools have benefited financially from education reform. The combination of state aid and municipal funding has boosted net school spending from \$61.0 million in FY94 to \$85.9 million in FY97 (40.3 percent increase). It should be noted that school spending reached its all time high in FY97 both in actual and constant dollars.

The school district's student profile presents challenges educationally and financially. These challenges include a student population comprised of a high percentage of students for whom English is a second language and a number of children in special education programs. Special education and bilingual programs are costing \$16.4 million or 21 percent of the total school committee expenditures as reported to DOE for FY97.

Academically, student achievement shows mixed results. Massachusetts Education Assessment Program (MEAP) scores from 1988 to 1996 were obtained from DOE. The scaled score performance for the fourth grade students remained stable, decreased for the eighth grade and were mixed for the tenth grade. The high school drop-out rate has decreased from 9.0 percent in 1993 to 7.3 percent in 1996. 48.5 percent of high school seniors continue on to four-year colleges, slightly below the state wide average (54 percent).

Scope of the Review

In preparation for the school district reviews the DOR team held meetings with officials from the Department of Education (DOE). The team had previously met with representatives of organizations such as the Massachusetts Taxpayers Foundation and the Massachusetts Municipal Association, etc. to obtain their views on education reform. The team also read published reports on educational and financial issues.

DOE provided a great deal of data including the end of year reports, foundation budgets, evaluations of test results for Brockton children, and statewide comparative data. The DOR's Division of Local Services Municipal Data Bank provided demographic information, community profiles, and overall state aid budget data. While on site in Brockton, the DOR team interviewed officials including, but not limited to, the mayor, the city chief financial officer, the school

committee chair, the school superintendent and selected school principals. Documents reviewed included both vendor and personnel contracts, invoices, payroll data, statistics on students and teachers as well as test results. A survey of school district employees was conducted to ascertain their views on educational goals and objectives, curriculum, planning, communication, budgets, professional development, supplies, facilities and technology.

In keeping with the goals set out by the Educational Management Accountability Board, the school district review was designed to determine whether or not basic financial goals related to education reform have been met. Data related to performance - test scores, student/teacher ratios and class sizes - were gathered to show results and operational trends. This report does not intend to present a definitive opinion regarding the quality of education in Brockton, nor its successes or failures in meeting particular education reform goals. Rather, it is intended to present a relevant summary of data to the EMAB for evaluation and comparison purposes.

This review was designed to focus on operational issues. It did not encompass all of the tests that are normally part of a year-end financial audit such as: review of internal controls; cash reconciliation of accounts; testing compliance with purchasing and expenditure laws and regulations; and generally accepted accounting practices. Financial transactions were only tested on a limited basis. Also excluded were federal grants, revolving accounts and student activity accounts. Statistical data relating to enrollment, test scores and other measures of achievements were not tested.

This report is intended solely for the information and use of the Education Management Accountability Board and the Brockton School District. However, this report is a matter of public record and its distribution is not limited.

III. GENERAL CONDITIONS AND FINDINGS

1. Brockton Overview

In 1990, Brockton's population was 92,788. It is a densely populated community with a geographic area of 21.4 square miles. Although Brockton's population remained relatively stable between 1970 and 1994, there were significant demographic shifts. Per capita income in Brockton was below the state average in 1989. The state average was \$17,224 while Brockton's average was \$13,455. There are 15,622 single family parcels in the community, with an average single family FY97 tax bill of \$1,759, close to the state average. During FY97, the city budget was \$191.0 million: property tax revenues accounted for 32 percent, state aid 45 percent, and local receipts and other funds made up the remaining 23 percent. The net school spending figure was \$85.9 million or 45 percent of the city's budget.

Brockton public schools have experienced major fluctuations in the student population between 1970 and 1990. While the total population in the city increased by 4.2 percent, the number of school age children between the ages 5 through 19 declined by 21 percent or 5,276. Although total

school enrollment declined from 1970 to 1990, a comparison of 1989 through 1996 shows that enrollments have increased modestly from 14,901 to 15,617.

The Brockton public school system consists of one high school (grades nine through 12), four junior high schools (grades seven and eight), and eighteen elementary schools (pre-kindergarten through grade six). The total school enrollment of 15,415, as of May 1997, includes the 2,149 special education (SPED) students (13.9 percent). BSD SPED enrollment is below the statewide average of 16.8%. Private schools are drawing 7.5 percent (1156) of the school population. The statewide average of children attending private schools in a community is 10.8 percent, higher than Brockton's percentage.

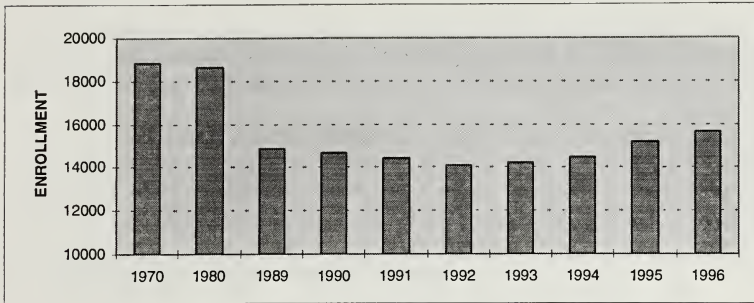
Chart 1

Brockton School District-Demographic Data		Brockton District	State Average
Enrollment Race/Ethnicity			
White		48.6%	77.9%
Non-White		51.5%	22.1%
Special Ed. (2,149 of 15,415 in May '97)		13.9%	16.8%
First Language not English		28.5%	12.7%
Limited English Proficiency		6.9%	4.7%
Percent Attending Private School		7.5%	10.8%
High School Drop-Out Rate	1996	7.3%	3.4%
	1993	9.0%	3.5%
Plans of Graduates Class of '96			
4 Year College		48.5 %	54.1%
2 Year College		23.9%	18.1%
Work		16.4%	16.3%

Note: Data provided by DOE

School enrollment declined significantly between 1980 (18,668) and 1990 (14,676). As of October 1996, enrollment increased to 15,617.

Chart 2



Note: Data provided by BSD

Chart 3 shows total enrollment for the pre-kindergarten, elementary, junior high and the high school. Included in the enrollment are students who are reported as SPED substantially separate, out of district or otherwise shown separately. These students numbered 1,127 in 1996.

Chart 3

Brockton School Enrollment as of October each year

	Elementary School		Jr. High School	High School	Certain SPED, etc.	Bilingual	Total Enrollment
Year	Pre-K	K-6	7-8	9-12			
89	0	8,150	2,105	3,059	773	814	14,901
90	0	8,054	2,146	2,854	693	929	14,676
91	33	8,012	2,111	2,825	593	862	14,436
92	8	7,829	1,982	2,774	599	875	14,067
93	82	7,895	1,998	2,689	625	909	14,198
94	105	7,958	2,086	2,700	622	1033	14,504
95	126	8,238	2,222	2,894	633	1084	15,197
96	140	8,469	2,240	3,008	633	1127	15,617
89-96 % Change	-	3.9%	6.4%	-1.7%	-18.1%	38.4%	4.8%
93-96 % Change	70.7%	7.3%	12.1%	11.9%	1.3%	24.0%	10.0%

Certain SPED, etc. includes: substantially separate SPED students, out-of-district students and some students classified otherwise.

In 1989 out-of-district students were included in numbers shown for schools.

2. School Finances

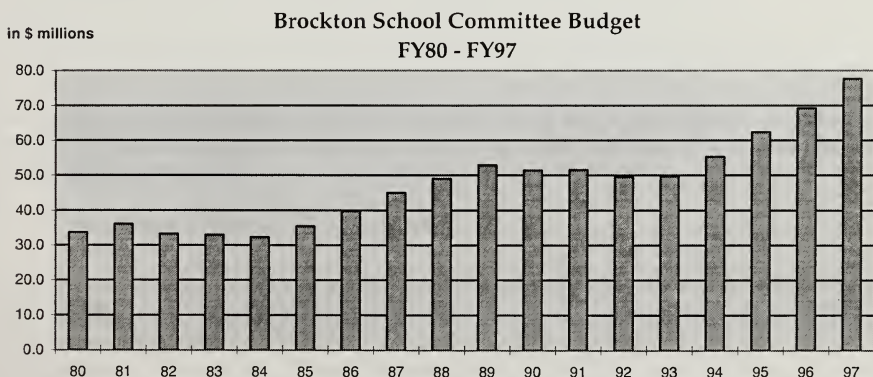
For the purposes of this audit, school funding is examined primarily from three perspectives: net school spending requirements, foundation budget, and the school committee budget. Net school spending requirements are issued by DOE and are consistent with education reform.

The school committee budget has been examined in some detail because it is the budget in which basic educational decisions are reflected. It is one component of total net school spending. The other component consists of costs charged by the city to the BSD for such items as employee insurance and other central costs paid for in the city budget.

3. School Committee Budget Trend

Brockton experienced a steady increase in school funding during the mid to late 1980s as illustrated in *Chart 4*. However, for three consecutive years beginning in FY91, budget reductions occurred. During this period, the school committee budgeted expenditures including EEO and Emergency grants decreased from \$51.5 million in FY90 to \$49.7 million in FY93, a reduction of \$1.8 million or 3.5 percent. To implement these budget cuts, the BSD initiated major staff reductions and program cuts. For example, instructional staff in the junior and high school went from 383 FTEs in FY89 to 285 FTEs in FY93, a reduction of 25.6 percent. If EEO grants had not been received, even larger cuts would have resulted. These grants were \$3.4 million in 1990, \$3.2 million in years 1991 and 1992. The city also received a \$3.4 million emergency grant in 1992 which softened the impact. These amounts are included in the school budget trends shown below.

Chart 4



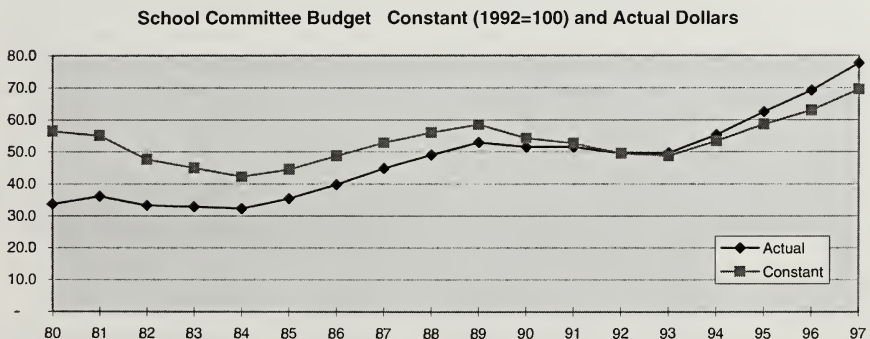
Note: Data obtained from BSD

As a result of increased state aid and local funding provided under the Massachusetts Education Reform Act of 1993, programs and staff have been restored to the district.

Chart 5 shows the school committee budget from FY80-FY97 in constant dollars with 1992 set at 100. The chart illustrates how the school committee budget fared over time with respect to inflation. Adjusting for inflation, the school committee's budget has seen two periods of significant expansion: during the late 1980's and since the inception of Education Reform in 1993.

In constant dollars, the school committee budgets of FY97 and FY96 were more than in FY89. If one assumes a two percent inflation factor for FY97, the actual FY97 budget of \$77.7 million would be \$69.5 million in constant dollars, which is \$10.7 million more than FY89 and \$20.8 million more than FY93. Thus, in constant dollars, the BSD has seen real budget increases between FY89, FY93 and FY97.

Chart 5



The school committee budget does not include allowable municipal costs for certain school services and benefits such as health insurance and retirement funds. These expenditures are included in the total school expenditure figures reported as net school spending.

4. Total School District Expenditures

Expenditures charged by the city to the school district were \$12.7 million in FY93, and increased to \$17.4 million in FY96. The major components were employee insurance, \$6.4 million; employee retirement contingencies, \$2.5 million; regional school assessments, \$2.1 million and general administration, \$1.0 million. It should be noted that for FY93 through FY95 the school committee absorbed the health costs, approximately \$6.5 million in each of those years, in its budget. These items are added to the school committee budget costs to determine net school spending, the key

measure for education reform and foundation budget targets. The term net school spending is used as of FY93.

Chart 6

**Brockton School District
Total School Spending
in \$ millions
As Reported**

	FY 89	FY 93	FY 94	FY 95	FY 96
School Committee	48.6	49.4	62.1	68.3	69.1
City	12.7	5.1	8.6	9.2	17.4
Total	61.3	54.5	70.7	77.5	86.6
BSD Health Costs	6.9	6.7	6.9	6.2	6.4

Using total city and school committee spending to arrive at actual and inflation adjusted expenditures per student figures, *Chart 7* provides the FY93 through FY97 trend. It indicates that actual expenditures per student have increased from \$3,640 in FY93 to \$5,443 in FY97, or 49.5 percent and the inflation adjusted figures have actually increased from \$3,532 to \$4,868 in 1992 dollars.

Chart 7

**Brockton School District
Total Net School Spending Per Student**

	FY94	FY95	FY96	FY97	FY94-FY97 % Change
Expenditures/Student in Actual \$	\$4,246	\$4,826	\$5,093	\$5,442	28.2%
Expenditures/Student in 1992 \$	\$4,064	\$4,523	\$4,639	\$4,868	19.8%

Note: Data obtained from year end DOE school reports

5. Net School Spending Requirements

Under education reform DOE has developed spending requirements for each school district. It uses a formula by which it allocates state aid and sets specific spending targets for each school district.

Expenditures which are counted as part of the formula for education reform constitute net school spending. Generally they include all school district education-related expenditures paid for with state aid, under Chapter 70, and municipal school appropriations. Expenditures excluded from the net school spending definition are items such as school transportation, school lunch, school

construction, certain capital expenditures and federally financed spending or spending from municipal or school revolving accounts.

Foundation budget targets are set each year for each district based in part on the school enrollment for that year and other criteria. DOE issues the foundation budgets and related financial standards and requirements to each school district.

Each district is required to provide a minimum amount of local funding and meet the net school spending requirement each year. For districts which are not spending at a foundation budget level, the goal is to have that district meet the foundation budget target by the year 2000 utilizing both increased state aid and in some cases increased local funding annually.

As indicated in *Chart 8*, the BSD is meeting its basic overall financial obligations established by DOE. In fact, Brockton has exceeded its required net school spending requirements for FY94 through FY97 by a small percentage. Per DOE, unspent net school spending amounts must be carried into the next year. A district must spend 95% of its net school spending or lose state aid.

Chart 8

**Brockton School District
Foundation Budget and Net School Spending (NSS)
\$ in millions**

	FY94	FY95	FY96	FY97
Foundation Budget Target	77.6	83.6	89.7	96.3
Required NSS as % of Foundation	76.5 %	79.5 %	85.0 %	88.9 %
Required NSS	59.4	66.5	76.2	85.5
Actual NSS	61.0	70.0	77.4	85.9
Variance \$	1.6	3.5	1.2	.4
Variance %	2.7 %	5.3 %	1.7 %	0 %
Actual NSS as % of Foundation	79 %	84 %	86 %	89 %
Data obtained from DOE				

For the period FY94 through FY96 , Brockton has exceeded its minimum required local contribution. For FY97, however, BSD was slightly below its local contribution. During this period state aid has absorbed an increasing percentage of the entire school budget for the district.

Chart 9

**Brockton School District
Foundation Budget and Net School Spending (NSS)
\$ in millions**

	FY94	FY95	FY96	FY97
Required Local Contribution	18.4	19.1	19.8	20.0
Actual Local Contribution	20.0	22.6	21.0	19.9
Variance \$	1.6	3.5	1.2	(0.1)
Variance %	8.7 %	18.3 %	6.0 %	0 %
Net School Spending	61.0	70.0	77.4	85.9
Local Share	20.0	22.6	21.0	19.9
State Aid	41.0	47.4	56.4	66.0
Local Share	33 %	32 %	27 %	23 %
State Aid	67 %	68 %	73 %	77 %

Note: Data obtained from DOE

Totals may not add due to rounding

6. School Committee Program Budget

The school committee budget has increased by \$27.9 million from FY93 to FY97 (from \$49.7 million to \$77.7 million), an increase of 56 percent. Hiring teachers to reduce class size generated the bulk of the budget increase. As can be seen in *Chart 10* , the largest portion of the additional money was allocated to certified staff salaries (teachers) at the various school levels, an increase of \$18.3 million or 61.8 percent. The FY 93 the school department included \$6.7 million for health insurance costs which were absorbed in the city budget in 1997 (see Chart 6).

A review of administration costs during this period revealed a moderate increase.

Appendix A provides an overview of programs funded in the school committee budget for FY89, FY93 and FY97 and tracks the increases and decreases for each program as well as the percentage of the total increase between FY93-FY97 (\$27.9 million) allocated to each category of the Brockton school district budget.

It should be noted that personnel services and maintenance costs are accounted for by school building. Such subjects as (SPED), bilingual and core curriculum subjects are included in the school building costs (e.g. high school). They are not reported, or broken down, by program or subject area for school committee budget reporting purposes. The latter reporting method had been noted in other Education Management Accountability Board audits. Finally, the results of our survey disclosed that 31% of the respondents rated the understanding of the school budget process as not good or inadequate.

Chart 10

**Brockton School District
School Committee Budget
Selected Areas Only**

\$ in thousands

						Inc./ (Decr.) as a % of 27.9		
				FY93-97 Inc. (Decr.)	% Inc.	Mil. Total Inc.	FY89-97 Inc. (Decr.)	% Inc./ Decr.
	FY89	FY93	FY97	(Decr.)	Inc.	Inc.	(Decr.)	Inc./ Decr.
Certified Staff Salaries:								
Brockton High	10,775	8,667	12,518	3,851	44%	14%	1,743	16%
Junior High	6,127	5,256	7,455	2,199	42%	8%	1,328	22%
Elementary	17,076	15,702	25,387	9,685	62%	35%	8,311	49%
Additional Personnel	629	0	2,557	2,557	-		1,928	307%
Total	34,607	29,625	47,917	18,292	62%	65%	13,310	38%
Non-Certified Staff Salaries:								
Paraprofessionals	1,098	1,230	2,358	1,128	92%	4%	1,260	115%
Health Insurance	0	7,402	0	-7,402	-100%	-26%	0	-
Equipment Rental/ Leases	183	53	1,632	1,579	2979%	6%	1,449	792%
Operational Expenses	249	292	1,553	1,261	432%	5%	1,304	524%
Total Budget	52,889	49,682	77,661	27,979	56%	100%	24,772	47%

Source: Data obtained from BSD

7. Foundation Budget

The foundation budget, which is determined by DOE, is a target level of spending designed to insure that equal educational resources are available in each district. The foundation budget is the sum of six factors. These factors are: payroll, non-salary expenses, professional development, expanded programs, extraordinary maintenance, and books and equipment. Each of these factors is calculated using the previous year's end-of-year pupil enrollment with adjustment made for special education, bilingual and low income students. An annual adjustment is also made for inflation.

The foundation budget establishes spending targets by grade (pre-school, kindergarten, elementary, junior high and high school) and program (special education, bilingual, vocational and low income). Grade and program spending targets are intended to serve as guidelines only and are not binding on local school districts. DOE uses foundation budgets to establish annual net school spending requirements as well as levels of state aid and minimum local contributions.

In order to encourage appropriate levels of spending, M.G.L. Chapter 70 Section 9 requires that a school district report to the Commissioner of Education when it has failed to spend the amounts incorporated in the foundation budget for four categories: professional development; textbooks; extended programs (generally considered expanded program for low income); and extraordinary maintenance. BSD's spending in these areas for FY95 and FY96 are shown in *Chart 10a*. Expenditures did not reach foundation budgets in any of the expenditure categories except for books and equipment in FY96.

Chart 10a

**Net School Spending
Foundation Budget
in \$000**

	FY95 ACTUAL NSS	FY95 FND BUDGET	FY95 NSS/FND %	FY96 ACTUAL NSS	FY96 FND BUDGET	FY96 NSS/FND %
Professional Development	140	1,353	10%	446	1,460	31%
Books and Equipment	3,332	4,088	82%	4,631	4,300	108%
Extraordinary	444	2,611	17%	0	2,818	0%
Maintenance						
Expanded Program	0	1,967	0%	0	2,187	0%

Appendix B shows the foundation budgets for BSD for FY94, FY95 and FY96. Expenditures and variances to the foundation budgets are shown as well. Appendix B further illustrates how expenditures compare as a percentage to the foundation budget for each year. A review of this data revealed that teaching salaries approximate foundation budget. In addition, assistants, principals, clerical, custodial, benefits, and miscellaneous all met or exceeded foundation targets. However, numerous items did not meet the targeted foundation levels. These areas include staff support, health, central office, expanded programs, professional development, athletic, SPED, extra-curricular, and extraordinary maintenance.

8. Staffing - FTE Trends

Staffing trends are best viewed over a long period of time. Brockton has tried to replace the 90 instructional staff positions that were eliminated from 1990-1993. In FY89 Brockton had an instructional staff of 908 (excluding Kindergarten) which was reduced to 818 in FY93 (10 percent). Administrators and clerical staff were unchanged during that period. Education reform money was used, in a large measure, to replace staff.

Instructional staff has been increased from 818 in FY93 to 1035 in FY97 (26 percent). As a result, the overall student to instructional staff ratio has decreased from 15.4:1 to 13.5:1. The number of administrative and clerical staff was constant over the same period. However, instructional, administrative and clerical staff levels are still below FY89 numbers.

Special education and bilingual program teaching staff are now well above FY89 levels. The high and junior high schools basic core subjects such as English, mathematics and science have not recovered, especially when adjusted for the student population. Art and music programs have about the same number of teachers in FY97 as in FY89. There were 11 less business teachers, 8 less industrial arts teachers and 7 less French teachers for this same period.

Chart 11

**Brockton School District
Instructional Staff**

	Secondary School Staff 7-12					Staff by School/Program					Enroll.	Students/Staff
FY	English	Soc St	Math	Science		Gr. 7-12	Gr. 1-6	SPED	BLing.	TOTAL	as of Oct. 1	Ratio
89	64	56	53	57		383	372	123	30	908	13,653	15.0
93	47	41	43	43		285	341	133	59	818	12,595	15.4
97	51	47	50	57		345	444	179	67	1,035	13,948	13.5

Note: Data obtained from BSD

Chart 12 shows elementary, junior high school and high school student/teacher ratios. When comparing FY90 to FY97, the number of pupils per teacher at the junior high and high school has increased. The elementary level showed a slight improvement for this period. The average sizes are in the core subject areas of language arts, math, science and social studies.

Chart 12

Brockton School District Student Teacher Ratios	FY90	FY93	FY97
Elementary	24.8:1	28.0:1	24.1:1
Junior High School	22.3:1	26.3:1	24.5:1
High School	20.7:1	24.5:1	25.0:1

Note: Core areas are Language Arts, Math, Science, Social Studies.

Note: Data obtained from the BSD.

9. Payroll - Salary Levels, Union Contracts, New Staff Costs

A review of salary expenditures indicates that salaries increased between FY93 and FY96 by 29.8 percent, more than the 25.2 percent increase in the total school budget. Salaries made up 85.1 percent of the budget in FY93 and 88.3 percent in FY96. Expenditures for teaching salaries increased by 38.4 % over this period and increased as a percentage of the total budget from 52.9% to 58.5%. These salary figures do not include fringe benefit costs.

Chart 13

School Department Salaries

in \$ millions	FY93/FY96				
	FY89	FY93	FY96	Increase	%
School Budget	\$49.1	\$49.7	\$62.2	\$12.5	25.2
Total Salaries	\$39.6	\$42.3	\$54.9	\$12.6	29.8
as % of Budget	81.6%	85.1%	88.3%	3.2%	
Teaching Salaries	\$25.3	\$26.3	\$36.4	\$10.1	38.4
as % of Budget	51.5%	52.9%	58.5%	5.6%	

Note: Data obtained from BSD

The review team analyzed all employee contracts from FY89 through FY96. Comparisons were made of teaching salaries, full-time equivalent teachers (FTEs), number of step increases, and new staff.

Chart 14

**Brockton School District
Expenditures for Teaching Salaries**

	FY89	FY93	FY94	FY95	FY96
Teaching Salaries (millions)	\$25.3	\$26.3	\$31.1	\$33.3	\$36.4
FTE - Teachers	751.1	636.8	727.6	764.2	810.6
Average Salary/FTE	\$33,717	\$41,244	\$42,777	\$43,568	\$44,862
FTE NET Increase/Decrease From Previous Year	15	1	114.9	36.6	46.4

Average salaries per FTE consist of all salaries, step increases, longevity and differentials (i.e., assistant principals, advisors, coaches etc.).

Note: Data obtained from DOE and BSD

FY94 was the first year that the education reform act impacted teacher salary schedules. From FY94 through FY96 salary increases for teachers were: FY94 - 3 percent; FY95 - 5 percent; and FY96 - 3 percent with \$300 added to the maximum step in all salary lanes. Overall, the average salary per FTE teacher increased by slightly more than 11 percent from FY 94 through FY 96.

In addition to teacher salaries, the team analyzed other personnel contracts such as principals and the superintendent. The principals normally negotiate separate contracts with the administration, however, from FY94 through FY96 the principals were included in the teachers' contract. **The superintendent and principals were given raises based upon a ratio of the teacher salary schedule, not performance.**

Chart 15

Comparison of FY94 through FY96 Teacher Salary Schedules
Steps 0 and 11 only

	FY94	Entry Level FY95	FY96	FY94	Highest Level FY95	FY96
B	\$23,050	\$24,200	\$24,930	\$36,860	\$38,700	\$40,160
B+15	\$23,380	\$24,550	\$25,290	\$38,130	\$40,040	\$41,540
B+30	\$23,870	\$25,060	\$25,810	\$39,260	\$41,220	\$42,760
M	\$24,210	\$25,420	\$26,180	\$41,940	\$44,040	\$45,660
M+15	\$24,570	\$25,800	\$26,570	\$42,850	\$44,990	\$46,640
M+30	\$25,000	\$26,250	\$27,040	\$43,640	\$45,820	\$47,490
M+45	\$25,290	\$26,550	\$27,350	\$44,690	\$46,920	\$48,630
Dr.	\$25,550	\$26,830	\$27,630	\$45,240	\$47,500	\$49,230

B=Bachelors Degree, M=Masters Degree, Dr.= Doctoral Degree, +15, +30, +45 = Credits Beyond Degree

Note: FY 94 salaries became effective on November 23, 1993

Note: Data obtained from BSD

Moving from step 10 in 1995 to step 11 in 1996 on the teachers' salary schedule, Masters + 45 lane, amounted to a raise of \$6770 or a 15.63% increase.

Our survey disclosed that 33% of the respondents stated that communications between teachers and district administration were either not good or inadequate. Also 33% stated that their roles in developing goals and objectives were not adequate.

10. Professional Development Program

For FY96 and FY97, DOE required school districts to spend at a rate equivalent to \$25.00 and \$50.00 per pupil respectively for staff professional development. An analysis of the BSD revealed an FY96 expenditure of \$380,959 or \$1034 more than required. This is still below the amount recommended in the foundation budget. For FY97 the amount expended was \$451,883, or \$328,967 less than required. Teachers are awarded professional development points (PDPs) for workshops that count towards teacher certification. Professional staff members have until 1999 to earn a minimum of 120 PDPs for certification.

The BSD Professional Development Plan offers in-service activities which range from one day workshops to courses for graduate credit through cooperating colleges and universities. Also, BSD has redefined the position of Administrative Assistant for Curriculum and Staff Development and has developed sign off procedures for professional development reimbursement.

In Brockton some professional development courses are given during school hours necessitating the hiring of substitutes. The principals, responsible for providing staff development at the building level, must choose which teachers attend these courses. **BSD officials state sending teachers to courses during instruction time causes conflict between professional development and education reform.**

As to our employee survey results, 32% of the respondents noted that they felt there were deficiencies in the professional development program.

Below is a partial list of twenty-five selected courses for 1995 and 1996.

Chart 16

	TITLE	P.D.P	Participants
1	Integrating Math, Science and Literature	60	3
2	Introduction to Cooperative Learning	45	32
3	Cooperative Discipline	45	32
4	Cooperative Learning Made Easy	20	58
5	Recipe for Reading Workshop	5	17
6	Peer Coaching / Mentoring	30	83
7	Teacher Museum Studies Program	40	20
8	Scott Foresman Calculator Workshop	2	15
9	Using Trade Books in the Content Areas: Fiction and Non - Fiction	2	29
10	Math From Many Cultures	2	27
11	Scott Foresman Science Program - Grade 6	4	34
12	Optical Data / Windows on Math	3	28
13	Crisis Intervention Prevention	7	16
14	Diagnosis & Management of ADD and ADHD in Young Children	4	26
15	Second Language Learner Workshop	12	14
16	Primary Math for Teacher Using Math I Can & Windows on Math	2.5	28
17	Project Wild	6	14
18	Assessment Techniques for Gifted and Non-Verbal Students	2	61
19	Boosting Self-Esteem for Educators	2	49
20	More New Games	2	10
21	CPR Recertification	4	62
22	Childhood and Adolescent Issues	2	14
23	Diagnosis & Management of Children Autistic Spectrum	2	23
24	Psychopharmacology	15	23
25	World Culture Seminar Series	15	20

Note: Data obtained from BSD

As noted above, Brockton reported \$451,883 as professional development spending. It was discovered that a \$25,000 payment was made from the FY97 professional development account to pay for an administrative reorganization study.

11. School Improvement Plans

M.G.L., Chapter 71, Section 59C requires school districts to establish school councils and to develop school improvement plans. It requires school committee approval of school improvement plans each year.

Each school improvement plan for Brockton includes a mission statement, several goals for the academic year and statements designed to establish methods of measuring the effectiveness and accomplishment of each goal. The first goals reflect desired improvements for the entire BSD. The remaining goals are for individual school improvement, reflecting program and issues and needs of the school community. Goals are measured in terms of participation, enthusiasm, and community support.

BSD does not compile interim or final reports to measure progress or the attainment of goals, though not a legal requirement. We noted that determining achievement of the prior year's goals is done in the next year's planning process. A standard method of evaluating school improvement plans should be implemented. The BSD central administrative office should require and monitor interim and final evaluation reports.

12. Time And Learning

Time and learning standards refer to the amount of time students are expected to spend in school, measured by the number of minutes or hours in a school day and the number of days in the school year.

The BSD developed a time and learning plan and negotiated with the Brockton Education Association. The time and learning standards recommended by the DOE were implemented in September 1997. DOE recommended standards call for 990 instruction hours per year for both the high school and junior high schools, and 900 hours of instruction for the elementary schools. The school year remains at 180 days per year. Negotiations added fifteen minutes per day for the high school, junior high schools, and elementary schools.

In September, 1997, a compensatory adjustment of 3.7% was made to all teacher salaries in addition to the 3% that had been negotiated. The 3.7% adjustment amounted to approximately \$2.1 million for teachers, paraprofessionals, and nurses.

Chart 17

	DOE	1996/1997		1997/1998	
	Standards	Hours Per Yr.	Min.Per Day	Hours Per Yr.	Min.Per Day
High School	990	783	266.33*	990	331.33*
Jr. High School	990	907	307.58*	984	333.33*
Elementary School	900	859	298.33*	915	313.33*
Kindergarten	NA	415	150.00	440	157.00

Note: data obtained from BSD

* Calculation includes 60 minutes for 5 days (equivalent to 300 minutes per year or 1.67 minutes per day) for testing not directly related to daily classroom instruction.

13. Technology and Computers

Use of computer technology in Brockton classrooms has been minimal over the past several years. Most of the computer equipment for student use is over five years old and has small hard drive storage with little RAM memory. The computer hardware has been basically a combination of Apple and DOS equipment for various levels of education. Only recently purchased equipment can utilize current software. Older equipment cannot accommodate today's larger interactive programs designed for systems with enhanced hard drive memory and higher levels of RAM. Currently, there are entire grade levels of students that do not have access to computer labs within their school due to a lack of equipment.

In 1996, the Brockton School Department contracted for a STAR Base student information system that is administrative in nature. The system handles student data, statistics and class information. All medical information from school nurses' files is currently being uploaded. The cost for the five year lease for this administrative database system is \$2,091,180. Included in this lease was the installation of 154 terminals for administrative functions, scheduling, tracking disciplinary data, grades, and medical records. The leasing and installation of this computerized system occurred prior to major classroom technology enhancements. This system has no classroom applications.

The Brockton School Department issued a five year technology plan in August of 1996. The plan's goals are virtually identical for years three, four and five. BSD has stated that the reason for the repetitive goals is to evaluate educational hardware and software technology in successive years.

14. Supplies and Textbooks

A review of supplies and text books at four elementary, two junior high and the high school revealed a concerted effort to maintain and improve textbooks in the Brockton schools. *Chart 19* shows the expenditures on texts and related educational supplies.

The team reviewed textbooks chosen at random from curriculum lists within the seven selected schools. The textbooks are relatively new, with the majority of the texts published in the late 1980's or the early 1990's.

During the financial crisis of the early 1990's, Brockton received \$942,538 in emergency grant money (Chapter 493 of 1992). Since this was a one time grant which had to be utilized immediately, the school department accelerated the purchasing of texts and supplies primarily in FY92, for planned expenditures in FY93 and FY94, resulting in limited expenditures in those years. BSD has increased spending on textbooks from the inception of education reform through planned FY 98 expenditures. In the employee survey, 37% of the respondents stated that they were generally not supplied with sufficient ancillary curriculum materials.

Chart 19

Brockton School District Expenditures on Textbooks in 000's

	FY89	FY93	FY94	FY95	FY96
High School	107.1	0	0.9	51.8	51.8
Jr. High School	51.8	0	0	118.3	118.3
Elementary School	282.9	0	137.2	331.2	331.2
Special Education	19.5	0	0	70.4	61.6
Bilingual	0	0	0	23.3	23.3
Other	25.2	0	0	0.4	9.6
Total	486.5	0	138.2	595.4	595.8
Grants (US and State)	83.5	23.3	0	56.7	67.9
Totals	570	23.3	138.2	652.1	663.7
Student Population	14,901	14,198	14,504	15,197	15,617
Expend. Per Student	38.26	1.65	9.53	42.91	42.5

Note: Data obtained from BSD

15. Test Scores

Brockton Scholastic Aptitude Test (SAT) scores are below the state average for 1994 through 1996.

Chart 20

Scholastic Aptitude Test (SAT)

Brockton School District SAT Scores	1994		1995		1996	
	Brockton	State Avg.	Brockton	State Avg.	Brockton	State Avg.
Verbal	382	426	389	430	460	507
Math	404	475	415	477	439	504
Total	786	901	804	907	899	1011
% Below Statewide Average	12.7		11.4		11.1	

Note: Data obtained from BSD

The Iowa Test of Basic Skills grade three reading test was administered throughout Massachusetts in the spring of 1997. Brockton's total percentile rank in reading, for all students tested under routine conditions, was 39. The statewide total percentile rank in reading was 65. There were four levels for reading comprehension performance: pre-reader, basic reader, proficient reader, and advanced reader. Only 50% of all students who were tested ranked as proficient or advanced readers. There was no difference in scores for students who have remained in the BSD from first to third grade (non transient).

The California Test of Basic Skills (CTBS) was administered to the fifth grade in 1994. It was replaced by the California Achievement Test (CAT5), which was administered in 1995 and 1996. Brockton's grade equivalency scores for reading were slightly below the national average for these three years.

Chart 21

CTBS and CAT5 Reading Scores

School Year	Test	Grade	Brockton	National Average
94	CTBS	5	5.3	5.7
95	CAT5	5	5.2	5.5
96	CAT5	5	5.1	5.5

Note: Data obtained from BSD

The state assessment program, the Massachusetts Educational Assessment Program (MEAP), has provided state and local policymakers with important information about the progress in Massachusetts schools. This assessment program, a part of the 1986 education reform legislation, Chapter 188, which was designed to provide for comparisons between schools and school districts, was given to grades four and eight every two years since 1988. *Chart 21A* shows MEAP Proficiency Scores for Brockton's fourth and eighth grades while *Chart 21B* shows Meap Scaled Scores for fourth grade in districts which began the MEAP assessment in a range of 1200 to 1240 in 1988.

An overview of the Brockton MEAP scores is in Appendix D. According to that overview, Brockton's scores are mixed for grades four, eight, and ten. The scaled scores for fourth grade reading have remained stable showing no improvement across the five administrations of the test; the scaled score performance for eighth graders has decreased in all subject areas over this same period and the scaled scores for tenth graders are mixed.

Chart 21A

MEAP Proficiency Scores - Fourth and Eighth Grades

Brockton Fourth Grade	1992			1996		
	Level 1 or below	Level 2	Levels 3 & 4	Level 1 or below	Level 2	Levels 3 & 4
READING	61%	25%	14%	61%	28%	12%
MATH	65%	28%	7%	64%	32%	3%
SCIENCE	71%	22%	8%	61%	32%	7%
SOCIAL STUDIES	64%	28%	9%	59%	35%	6%
Eighth Grade	Level 1 or below	Level 2	Levels 3 & 4	Level 1 or below	Level 2	Levels 3 & 4
READING	54%	23%	22%	51%	33%	15%
MATH	58%	25%	17%	60%	31%	9%
SCIENCE	58%	21%	19%	62%	28%	10%
SOCIAL STUDIES	59%	22%	18%	59%	30%	10%

It is anticipated that a Level 2 score would be equivalent to the standard for passage in the future assessment program.

Chart 21B

MEAP Scaled Scores - Fourth Grade

Reading	1996 - 1997 Enrollment	1988	1990	1992	1994	1996	Change
Brockton	15,106	1220	1220	1210	1220	1200	-20
Cambridge	7,793	1200	1220	1240	1260	1230	30
Chicopee	7,320	1210	1240	1250	1270	1270	60
Haverhill	8,244	1230	1250	1310	1310	1280	50
Lowell	15,359	1200	1210	1220	1210	1180	-20
Lynn	13,705	1210	1200	1230	1230	1240	30
Malden	5,031	1240	1290	1280	1320	1310	70
Medford	5,165	1230	1280	1290	1330	1310	80
New Bedford	14,264	1200	1220	1270	1320	1270	70
Quincy	8,455	1240	1280	1320	1330	1310	70
Somerville	5,802	1200	1200	1260	1300	1290	90
Southbridge	2,611	1230	1210	1220	1260	1310	80
Springfield	22,391	1230	1200	1200	1230	1230	0
Ware	1,251	1210	1300	1230	1310	1260	50
Worcester	22,989	1230	1260	1280	1300	1350	120
State		1300			1350	1350	50
Mathematics	1996 - 1997 Enrollment	1988	1990	1992	1994	1996	Change
Brockton	15106	1220	1230	1220	1200	1180	-40
Cambridge	7793	1200	1210	1240	1240	1230	30
Chicopee	7320	1190	1270	1270	1250	1250	60
Haverhill	8244	1230	1220	1300	1270	1260	30
Lowell	15359	1220	1230	1230	1210	1190	-30
Lynn	13705	1190	1210	1270	1230	1220	30
Malden	5031	1240	1240	1280	1300	1300	60
Medford	5165	1250	1260	1280	1300	1280	30
New Bedford	14264	1220	1250	1300	1350	1290	70
Quincy	8455	1240	1280	1300	1310	1290	50
Somerville	5802	1180	1210	1240	1250	1260	80
Southbridge	2611	1220	1220	1240	1250	1240	20
Springfield	22391	1220	1210	1200	1230	1240	20
Ware	1251	1240	1230	1200	1260	1250	10
Worcester	22989	1230	1260	1280	1300	1370	140
State		1300			1330	1330	30

Note: A 50 point change is considered to be statistically significant.

16. Hiring and Evaluation of Teachers and Principals

The BSD developed guidelines for hiring, effective in 1993, to conform with education reform. The personnel department screens applications and the department head, the assistant principal, and the principal interview candidates before hiring. Principals may also establish an in-house screening committee. Either the superintendent or his designee interviews and approves all recommended candidates. Screening committees interview people for positions that report

directly to the superintendent. The Administrative Assistant for Personnel is responsible for coordinating the process. All application records are kept centrally in the administrative office.

The district has an evaluation process, agreed to by contract, which requires that certified staff members with professional status be evaluated once every two years, with a minimum of two and a maximum of four reviews. Certified staff members without professional teacher status are evaluated at least twice per semester with a maximum of six reviews per year.

Although evaluation systems and processes are in place, it was noted that for 1995/1996 the principals were not evaluated. From FY94 through FY96 the superintendent and principals were given a raise based upon a ratio of the teacher salary scale.

Site based management, as it relates to budgeting for principals, was not instituted until the 1997 school year.

SIGNIFICANT EDUCATION MILESTONES AND ISSUES

17. Review of Expenditures

The team reviewed expenditures for FY96 and FY97 in detail conducting tests to evaluate the system of expenditures to determine if proper accounts are being utilized and to test the appropriateness of BSD expenditures. Tests included a review of purchase orders, invoices, receiving documents, check registers and the chart of accounts. Expenditures for leased property and equipment were also reviewed.

The Brockton school police department expenditures and policies were included in the review. The BSD has a special police force, established in 1980. Funded within the school department budget, the budgeted amounts for this force range from a \$143,958 in FY92 up to \$302,880 for FY97. The school police has eight officers and three marked patrol cruisers. All officers are male, uniformed, and have specialized vest protection. Each officer is issued a 40 caliber "Glock" 22 with expanded magazine loaded with hollow point bullets. They operate two shifts per day. All officers have the power of arrest on school property. They have full police training and are certified with firearms. School police will enter the schools wearing firearms if an arrest is being made or when an emergency exists. The school police officers lock up their firearms before entering schools for routine business. The Brockton special school police is unique in that it is the only armed school police force in Massachusetts. Other school departments utilize their city or town police departments, or have unarmed security forces.

The team reviewed two real estate leases: St. Coleman's School and the Belmont Street School leases. The Inspector General took issue with both school leases based on the fact that the full School Committee did not vote on these leases and the situation was not deemed to be an emergency. The leases were subsequently renegotiated. The St. Coleman's School lease calls for

rent of \$169,600 per year, escalating to \$286,536 per year at the end of the five year lease period. The Belmont St. lease calls for rent payments of \$492,060 per year for a lease period of seven years. Per an August 15, 1997 regulation issued by DOE (CMR 603 10.00 section 10.06), leased school buildings and classroom space is only included in Net School Spending for the initial three years of the lease. This may cause budgetary concerns for Brockton since these leases run for five and seven years respectively.

18. Transiency Issue

The BSD defines transients as students who enter and or leave the system after the first day of school. Thirty-seven percent of the students enrolled in 1997 were transients. For the same time period, Malden has a transiency rate of thirty-six percent, Everett has a rate of seventeen percent, Revere twenty-four percent, and Somerville twenty-seven percent. The transiency rate for Lowell from October 1st was twenty-six percent. School officials state that transiency disrupts learning and interrupts the continuity of instruction in the classroom.

19. Special Education (SPED) and Bilingual

DOE reported that in 1997, Brockton had a special education participation rate of 13.9 percent, 2.9 percent lower than the state average of 16.8 percent.

Enrollment figures for special education are reported and used in a number of different ways. The headcount figure for the month of June each year is used by DOE to provide statewide comparisons on student enrollment in the program. The fiscal year average membership is reported by school districts at year end and provides a measure of full time equivalency in the program. Substantially separate students are students whose education takes place in a setting that is: (1) self-contained within the public school; (2) in an outside placement but in a public school; (3) in a private Chapter 766 approved SPED school day placement; or (4) is a full time residential placement. This can also include private placement in a home or hospital and is inclusive of certain preschool programs.

Total SPED enrollment, as well as the number of students who fall into the substantially separate categories, have remained somewhat constant over the last several years. It is noteworthy that the total number of students served in SPED reached a high of 2,144 in 1996. This is attributable to increased overall school enrollment in recent years.

Chart 22

**Brockton School District
Analysis of SPED Enrollment
Based on October 1, Report**

Year	Total SPED	% SPED to Total Enrollment	Substantially Separate
1991	2082	14.60%	603
1992	1959	14.10%	554
1993	1907	13.60%	554
1994	1948	13.40%	539
1995	1980	13.20%	547
1996	2144	13.80%	589

Note: Data obtained from BSD

During FY97, Brockton's SPED expenditures accounted for 15.8% of the total school expenditures reported to DOE, versus 8.5% in FY93. The increase in SPED from FY93 to FY97 has been \$ 5.7 million, or 86.7 percent, while the increase in overall school expenditures as reported to DOE for the same period was 78.9 percent. Finally for FY94 through FY97 BSD was below foundation budget for a portion of the SPED costs titled Special Needs Tuitions.

Chart 23

**Brockton School District
School Committee Expenditures as Reported to DOE
in \$000's**

	FY90	FY93	FY97	FY93-97 INC/(DECR)	% INCR	FY90-97 INC/(DECR)	% INCR
Special Education	6,473	6,552	12,237	5,685	86.7%	5,764	89.19%

Note: Data obtained from BSD

Brockton school department personnel attribute SPED increases to increased teacher salaries, increased costs for private therapists, worsening of certain children's disabilities, increased transportation costs and increased costs for private schools for certain disabled students.

The Brockton Public Schools also offer a program in transitional bilingual education in Grades K-12 to all non-English speaking, or limited English speaking students, with 20 or more students of the same linguistic group. For non-English speaking students numbering less than 20 (Low Incidence), English as a Second Language support is provided through teacher aides and liaison

personnel. Brockton currently has programs of transitional bilingual education in grades K-12 for Cape Verdean, Spanish speaking and Haitian students.

During FY97 Brockton bilingual expenditures were 5.1% of school committee expenditures reported to DOE versus 3.0% for FY93. The increase in bilingual costs from FY93 to FY97 has been \$1.6 million, or 69.6%. The increases in bilingual costs were attributable to increased students and teachers associated with the program. In FY93 there were 1027 students and 82 teachers for a ratio of 12.5:1, while in FY97 there were 1145 students and 115 teachers resulting in a ratio of 10.1:1.

20. Courses and Class Sizes

A review of high school classes for 1997 - 1998 was undertaken to assess class sizes. The school's average enrollment in each section was less than 25 with the exception of Social Studies. The Bilingual program had the smallest average class size, 12 students; Social Studies had the largest, 26 students.

Chart 24

Brockton School District High School Classes School Year 1997 - 1998

	Number of Sect.	Total Enroll.	Avg Enroll. Per Section	Sections 25 or more	% Sections 25 or more	Sections 30 or more	% Sections 30 or more
English	137	2837*	21	75	55%	23	17%
Math	109	2285*	21	74	66%	39	34%
Science	169	3418	20	53	31%	9	5%
Social Studies	127	3269	26	87*	68%*	35	28%
ELMS	126	1501	12	6	4%	2	1.50%

* Doesn't include students in ESL & Bilingual classes

ELMS - English as a second language

Note: Data obtained from BSD

FINDINGS OF CERTAIN FINANCIAL DEFICIENCIES

- 21a The accounts payable system has an internal control weakness in the area of signoff and verification of goods and services purchased. Receiving documents are not forwarded to the accounts payable office at the central headquarters for verification and processing. To correct this situation we suggest that signed receiving documents be forwarded to the accounts payable office within the school administration building for verification and payment backup.
- 21b The school department and the city of Brockton have no accounting system in place to account for, or control, the fixed assets. The Brockton School Department should set up a fixed asset group of accounts for the appropriate accounting and control for the life, disposal and adjustments for loss of fixed assets.

IV. EMPLOYEE SURVEY

As part of the audit, the review team conducted a confidential survey of all employees of the BSD to provide a forum for teachers and staff to express their opinions on education in Brockton. Out of the 1,700 questionnaires delivered to school staff, 400 staff members, or 24 percent, responded. Areas covered by the survey included the following: 1. education reform; 2. education goals and objectives; 3. curriculum; 4. planning; 5. communications and mission statements; 6. budget process; 7. professional development; 8. supplies; 9. facilities; 10. computers and other education technology.

The survey results indicate that teachers do not seem to have a clear vision of how education reform improves education in the classroom. According to the survey teachers think that an increase in school funding is tied directly to improvements in education, by a ratio of 67 percent affirmative to 12 percent negative with 20 percent unsure. However, while 66 percent think that their job has changed because of education reform, only 35 percent believe there has been an improvement in student achievement. Finally, 32 percent think that the improvements in education at the school would have occurred without education reform, 32 percent disagree and 36 percent were unsure.

Other survey results were: 67 percent positive concerning whether teachers have a role in developing goals and objectives; 67 percent positive concerning adequate communication between teachers and district administrators; 69 percent positive on understanding the school budget; 32 percent stated that there are deficiencies in the professional development program; 70 percent positive concerning the process for obtaining supplies and materials, 65 percent positive rating on the overall state of school facilities and classrooms; and an overall need for more computers. For the complete survey and results, see Appendix F.

V. SUPERINTENDENT'S STATEMENT - EDUCATION REFORM

As part of this review the superintendent was asked to submit a brief statement expressing the school district's point of view with respect to three areas:

1. school district progress and education reform since 1993
2. barriers to education reform
3. plans over the next 3 to 5 years

The superintendent's statement is included in Appendix F.

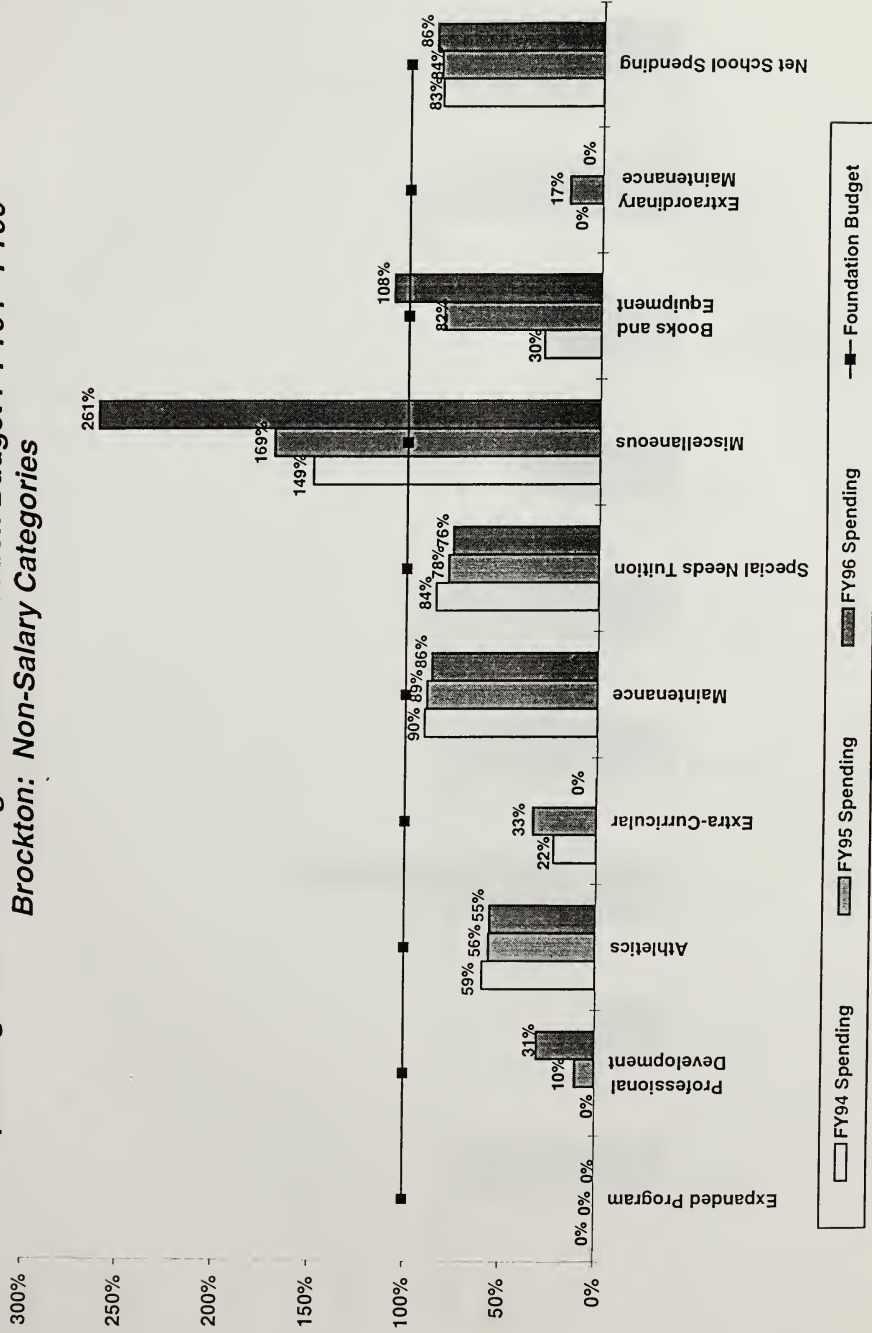
VI. APPENDIX

Appendix A -	School Committee Program Budget
Appendix B -	Foundation Budget Line Items Targets and Expenditures FY94-97
Appendix C -	Mass. Educational Assessment Program (MEAP) Test Scores by Grade
Appendix D -	DOE Summary of Brockton School District MEAP Scores
Appendix E -	Employee Survey Survey Instrument and Results
Appendix F -	Superintendent's Statement on Education Reform Accomplishments, Barriers and Goals
Appendix G -	Brockton School Department Response

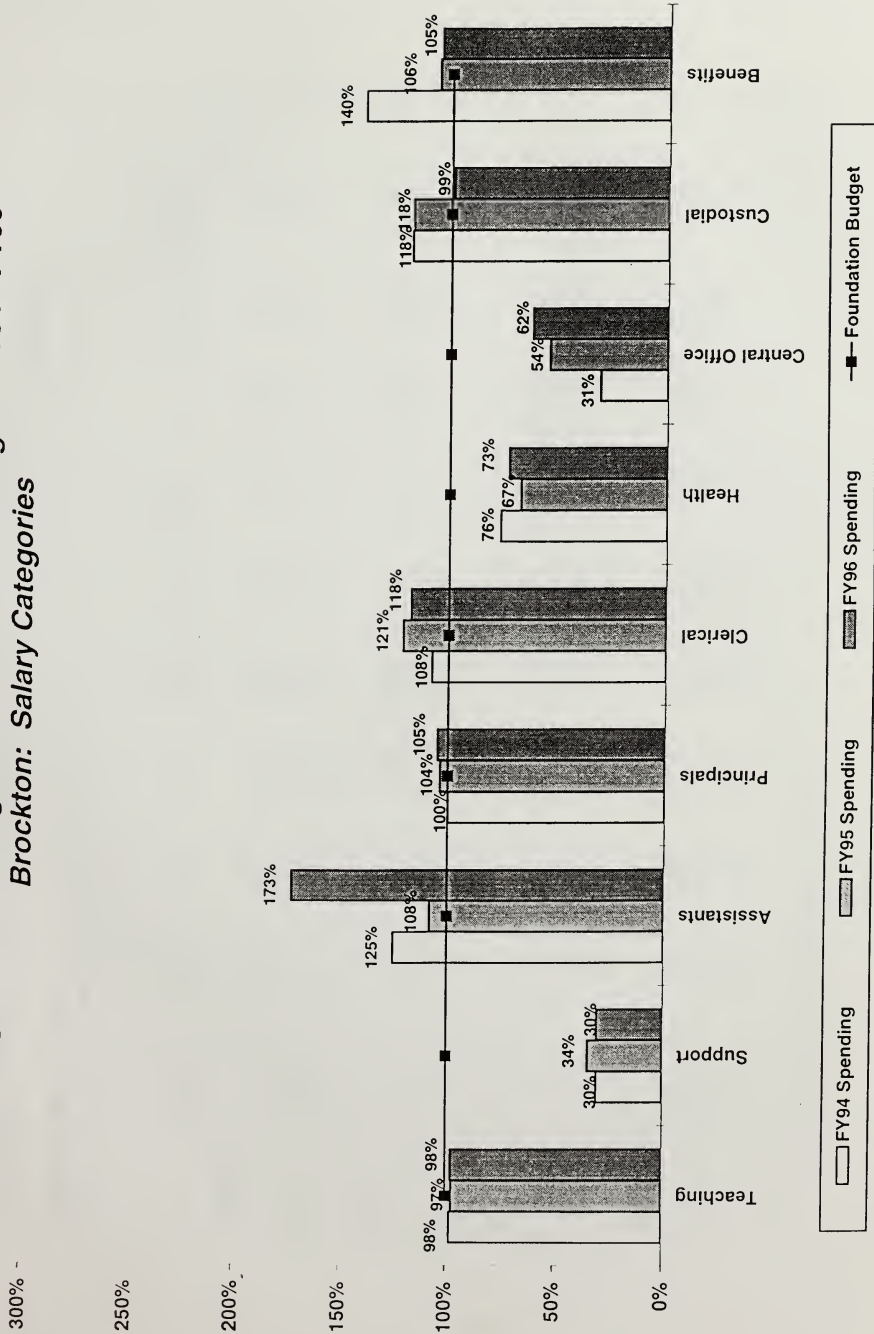
Brockton School District									
School Budget									
in \$000's									
	FY89	FY93	FY97	FY93-97 Inc. (Dec.)	% Inc. (Dec.)	FY89-97 Inc. (Dec.)	% Inc. (Dec.)		
Additional Personnel	172	36	119	83	230.6%	-53	-30.9%		
Secretarial/ Data Specialist	1559	1564	1817	253	16.2%	258	16.6%		
Paraprofessionals	1098	1230	2358	1128	91.7%	1260	114.8%		
Doctors	40	22	22	0	0.0%	-18	-44.3%		
Attendance Supervisors	56	74	93	19	25.7%	38	67.1%		
Department Heads	156	98	162	63	64.4%	6	3.5%		
Custodians	3191	2340	3083	744	31.8%	-108	-3.4%		
School Police	331	202	303	101	49.7%	-28	-8.5%		
Facilitators	33	76	128	52	69.1%	95	286.9%		
School Traffic		301	303	2	0.6%	303	-		
Total Non.- Cert. Staff	6636	5943	8388	2445	41.1%	1752	26.4%		
E.E.O. Grant	(3,372)	(5,743)	0	5743	-100.0%	3372	-100.0%		
Total Personnel Services	39608	42249	59834	17585	41.6%	20227	51.1%		
Ordinary Maintenance									
Instructional Supplies	821	148	1086	938	633.6%	264	32.2%		
Textbooks	487	0	883	883	-	396	81.5%		
Libraries/Professional Books	39	1	134	133	13260.0%	95	242.6%		
Health Supplies	16	5	15	10	203.2%	-1	-4.6%		
Athletics Programs	121	40	145	105	261.6%	24	19.6%		
Fuel Oil/ Natural Gas	774	754	1353	599	79.5%	579	74.8%		
Electricity	1596	1706	1830	124	7.2%	234	14.7%		
Water & Sewer	104	84	140	57	68.2%	37	35.2%		
Telephone	179	180	201	21	11.5%	22	12.2%		
Buildings & Grounds	545	215	453	237	110.3%	-92	-16.9%		
Graduation	5	3	5	2	80.0%	-1	-16.3%		

Brockton School District School Budget in \$000's									
	FY89	FY93	FY97	FY93-97 Inc. (Dec.)	% Inc. (Dec.)	FY89-97 Inc. (Dec.)	% Inc. (Dec.)		
Pk/ling	39	21	58	37	170.4%	19	47.1%		
Contract Services/ Repairs	380	343	968	625	182.5%	588	154.7%		
Equipment Rental/ Leases	183	53	1632	1579	2974.1%	1449	792.0%		
Memberships	15	11	12	2	16.2%	-3	-19.9%		
Operational Expenses	249	292	1553	1262	432.7%	1305	524.5%		
Transportation	2900	2691	4070	1380	51.3%	1170	40.4%		
Tuition	1299	1607	2255	647	40.3%	956	73.6%		
E.E.O. Supple. Grant - Repairs	0	200	0	-200	-100.0%	0	-		
New Equipment	15	0	359	359	-	344	2300.0%		
Instructional Technology	0	0	360	360	-	360	-		
Non- Instructional Technology	0	0	92	92	-	92	-		
Extraordinary Maintenance	0	0	0	0	0	0	-		
Cooperative Distributive Education	0	4	0	-4	-100.0%	0	-		
School Traffic	0	5	5	0	0.0%	5	-		
Facility Maintenance (Bldg. Dept.)	0	0	200	200	-	200	-		
Microcomputer Software	133	0	0	0	-	-133	-100.0%		
Less: E.E.O. Supple. Grant - Repairs	0	-200	0	200	-100.0%	0	-		
Total Ordinary Maintenance	9901	8161	17807	9646	118.2%	7906	79.9%		
Total Travel Outside- State	18	10	20	10	100.0%	2	11.1%		
FY School Budget/ Appropriation	49527	50420	77661	27241	54.0%	28135	56.8%		
Less : School Budget Health Costs	0	-6682	0	6682	-100.0%	0	-		
Plus: EEO Grants	3372.316	5942.839	0	-5943	-100.0%	-3372	-100.0%		
Adjusted Final Budget	52899	49682	77661	27980	56.3%	24762	46.8%		

Spending as a Percentage of the Foundation Budget : FY94 - FY96 Brockton: Non-Salary Categories



Spending as a Percentage of the Foundation Budget : FY94 - FY96 *Brockton: Salary Categories*



MEAP SCORES -BROCKTON

The Massachusetts Educational Assessment Program was a biennial curriculum assessment that tested reading, mathematics, science and social studies at grades 4, 8 and 12 in 1988; in 1994 the secondary grade tested was moved from grade 12 to grade 10. The last administration of this program was 1996. The purpose of MEAP was twofold: to provide data for comparisons; and to provide schools and districts with information that could be used to improve curriculum and instruction.

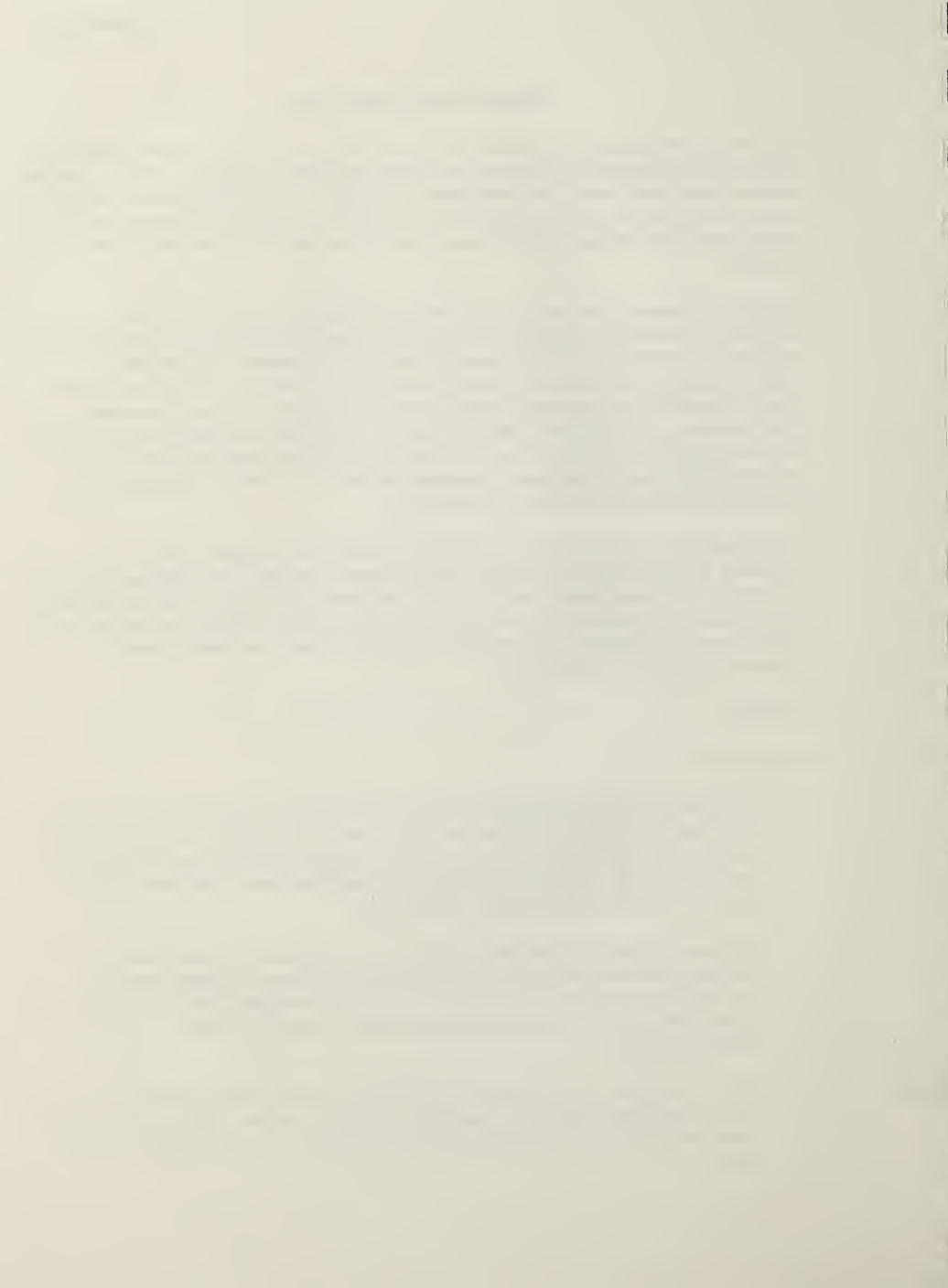
MEAP reports scores in two ways: scaled scores which range from 1000 to 1600; and proficiency levels which are reported as percentages of students in each level. In 1988, the state average for the scaled scores was determined to be 1300 in all subjects. In subsequent administrations, the state average has risen. Scaled scores are relative to the state average and allow for longitudinal comparisons as well as comparisons between districts. Open-ended question results account for 30% of the total scaled score; multiple choice questions account for the remaining 70% of the scaled scores. A change of fifty or more points in a scaled score is considered educationally significant. This means that there is a noticeable difference in the behaviors and responses of students in a classroom.

In 1992, MEAP began to use proficiency levels as another means of reporting test results. Proficiency levels are descriptive statistics based on external absolutes--the proficiency levels are not relative to other proficiency levels in the state, but based on how students perform relative to external criteria. The proficiency levels range from Below Level 1 (which means that the student did not answer the questions so we do not have enough information on which to make a judgement) to Level 4, the highest level.

GRADE 4

Scaled Scores

- The scaled scores for fourth grade reading have remained relatively stable across the five administrations of the test in Brockton starting with 1220 in 1988 and closing with 1200 in 1996. The highest scaled score attained was 1220 in 1988, 1990, and 1994; the lowest was 1200 in 1996. The scaled scores for open-ended questions ranged from a high of 1260 in 1992 and 1994 to a low of 1220 in 1996.
- The scaled scores for fourth grade mathematics have remained somewhat stable over the five administrations starting with 1220 in 1988 and ending with 1180 in 1996. The highest score for mathematics was 1230 in 1990; the lowest score was 1180 in 1996. The scaled scores for open-ended mathematics questions were 1220 in 1992, 1230 in 1994, and 1200 in 1996.
- The scaled scores for fourth grade science started at 1210 in 1988 and ended with 1200 in 1996. The highest scaled score was 1220 in 1994; the lowest was 1200 in 1992 and 1996. The scaled scores for open-ended science were 1230 in 1992, 1240 in 1994, and 1230 in 1996.



- The scaled scores for fourth grade social studies started at 1220 in 1988 and ended at 1210 in 1996. The highest score attained was 1230 in 1990, the lowest was 1210 in 1992 and 1996. Scaled scores for open-ended questions were 1230 in 1992, 1260 in 1994, and 1230 in 1996.
- In 1996, fourth graders in Brockton scored at least 50 points below their comparison score bands in all subjects. A comparison score band is a range of scores that permits a school to compare its results to what it would have scored if it had scored at the average level for its socioeconomic background. The comparison score band for fourth grade reading was 1250 to 1290 in 1996. The score bands show a slight variation for different subjects because the state average for each subject is different.

Proficiency Levels

- In reading, the percentage of students scoring at or Below Level 1 remained the same at 61% in 1992 and in 1996. Also, the percentage at Level 2 increased slightly from 25% in 1992 to 28% in 1996. The top levels, 3 and 4, decreased from 14% in 1992 to 12% in 1996.
- The percentage of fourth graders scoring at or below Level 1 in mathematics decreased slightly from 65% in 1992 to 64% in 1996 while the percentage scoring in Level 2 increased from 28% to 32% between 1992 and 1996. In 1992, 7% of the fourth graders scored at or above Level 3 while in 1996, 3% scored there.
- Seventy-one percent of the Brockton fourth graders scored at or below Level 1 in 1992 in science while 61% scored in the two lowest categories in 1996. In 1992, 22% scored at Level 2 and in 1996, 32% achieved a score of Level 2. A decrease from 8% to 7% occurred at Levels 3 and 4 between 1992 and 1996.
- Sixty-four percent of the Brockton fourth graders scored at or below Level 1 in 1992 while in 1996, 59% fell into the same categories in social studies. Level 2 increased from 28% in 1992 to 35% in 1996. In 1992, 9% of the fourth graders scored at levels 3 and 4 in social studies while in 1996, 6% scored at levels 3 and 4.

GRADE 8

Scaled Scores

- Reading scores for eighth graders have dropped from 1270 in 1988 to 1240 in 1996. The highest reading score attained by Brockton eighth graders was 1280 which they achieved in 1994. The lowest reading score they received was 1240 in 1990 and 1996. Scaled scores for open-ended reading questions were 1240 in 1992, 1280 in 1994, and 1240 in 1996.
- Scaled scores for eighth grade mathematics have dropped from 1260 in 1988 to 1210 in 1996. The highest eighth grade mathematics score was 1260 in 1988 and the lowest was

1210 in 1996. Open-ended scores in mathematics were 1240 in 1992, 1220 in 1994, and 1210 in 1996.

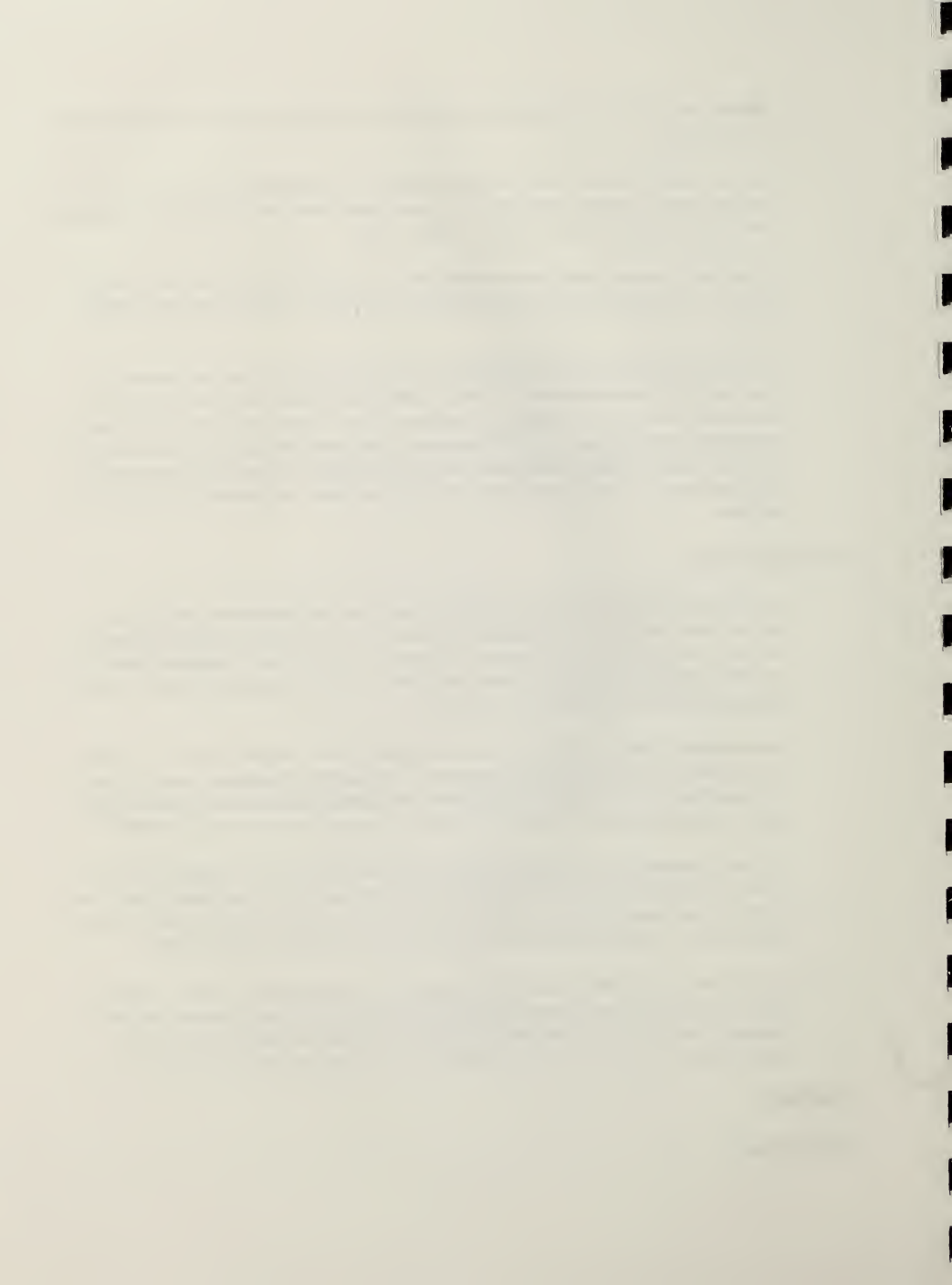
- Science scaled scores for Brockton eighth graders have dropped from a high of 1250 in 1988 to a low of 1190 in 1996. Scores for open-ended questions in science have dropped from 1230 in 1992 to 1210 in 1994, to 1200 in 1996.
- Social studies scaled scores have dropped from a high of 1250 in 1988 to a low of 1200 in 1996. Open-ended scores in social studies were 1220 in 1992 and 1994, and 1200 in 1996.
- In 1988 and 1990, Brockton eighth graders scored either within their comparison score band or slightly above the band. In 1992, eighth graders scored at the low end of the comparison score band in reading and mathematics, and slightly below the score band in science and social studies. In 1994, Brockton eighth scored within their score bands, but at the low end, in reading mathematics, and social studies; in science they scored below the score band. In 1996, eighth graders scored below their comparison score bands in all subjects.

Proficiency Levels

- In 1992, 54% of the eighth graders scored in the bottom two proficiency levels, e.g. Below Level 1 and Level 1 in reading. In 1996, 51% of the Brockton eighth graders fell into these categories. The percentage of students scoring at Level 2 increased from 23% in 1992 to 33% in 1996. The percentages of Brockton eighth graders at Levels 3 and 4 in reading was 22% in 1992 and 15% in 1996.
- In mathematics, 58% of the eighth graders scored at Level 1 or Below Level 1 in 1992. In 1996, 60% scored in those same categories. The percent of students scoring at Level 2 increased from 25% in 1992 to 31% in 1996. Seventeen percent of the Brockton eighth graders scored at Levels 3 and 4 in 1992 while 9% scored at levels 3 and 4 in 1996.
- Fifty-eight percent of the Brockton eighth graders scored at Level 1 or Below Level 1 in science in 1992. In 1996, 62% of the eighth graders scored at the two lowest levels. The percent of students scoring in Level 2 rose from 21% in 1992 to 28% in 1996. At the two highest levels, 3 and 4, the percent decreased from 19% in 1992 to 10% in 1996.
- In 1992 and in 1996, 59% of the eighth graders in Brockton scored at Level 1 or Below Level 1 in social studies. The percent of students achieving Level 2 in social studies increased from 22% in 1992 to 30% in 1996. In 1992, 18% of the Brockton eighth graders scored in Levels 3 and 4; in 1996, 10% of the eighth graders scored there.

GRADE 10

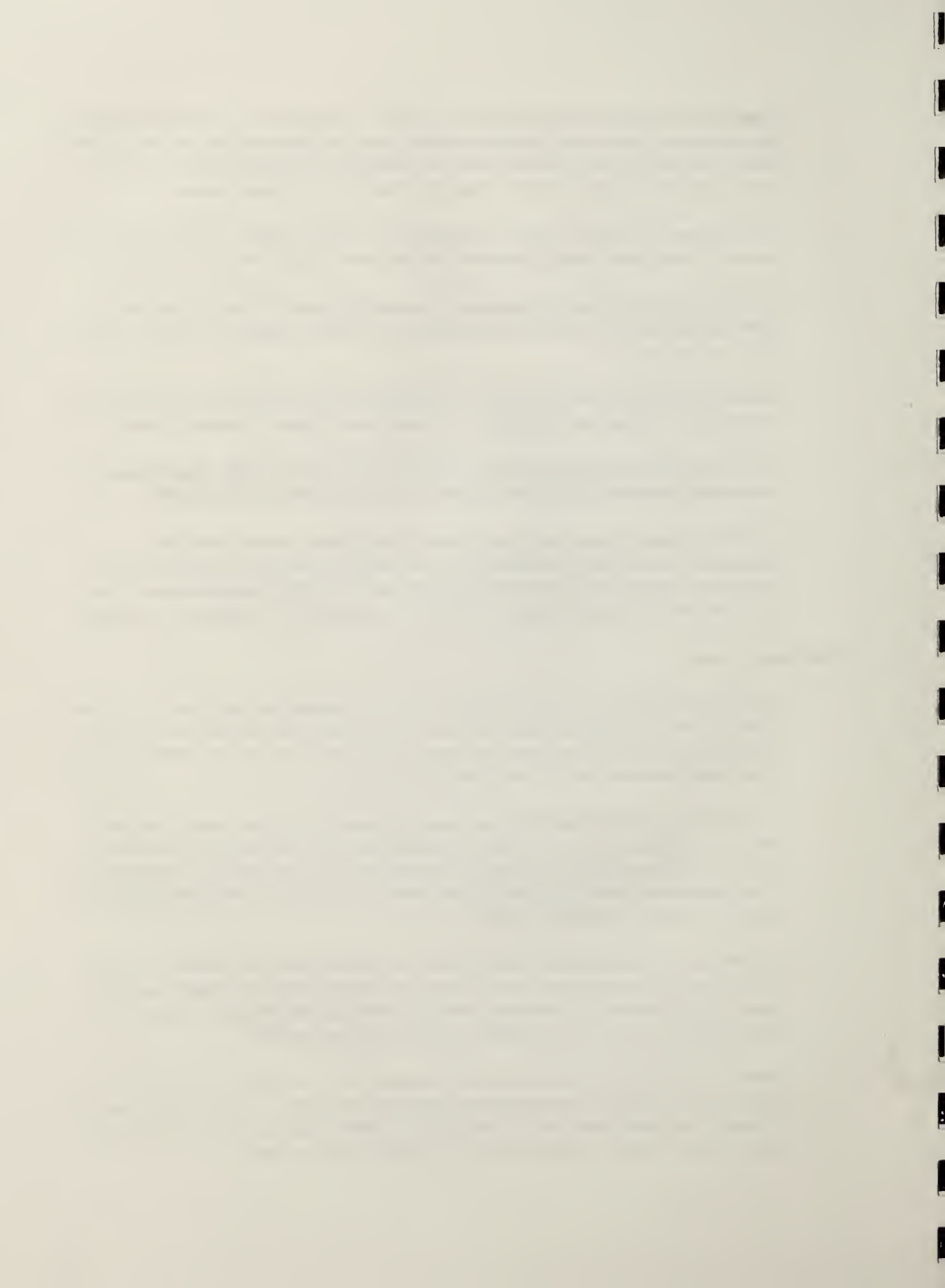
Scaled Scores



- Massachusetts began testing tenth graders in 1994. This report will only deal with tenth grade scores or those scores that have occurred since the Education Reform Law of 1993. Please note that only two years of scores are available so the changes made over five administrations at grades 4 and 8 will not be evident in two administrations.
- Scaled scores for reading at grade 10 dropped from 1280 in 1994 to 1260 in 1996. Scaled scores for open-ended reading questions dropped from 1300 in 1994 to 1270 in 1996.
- Tenth grade scaled scores for mathematics remained the same at 1240 in 1994 and in 1996. Scaled scores for open-ended reading questions also remained the same at 1240 in 1994 and in 1996.
- Science scaled scores rose 40 points for tenth graders from 1250 in 1994 to 1260 in 1996. Scaled scores for open-ended questions in science were 1260 in 1994 and in 1996.
- In social studies, tenth graders scored 1280 in 1994 and 1270 in 1996. Social studies open-ended question scaled scores dropped from 1290 in 1994 to 1270 in 1996.
- In 1994, in reading, science and social studies, tenth graders scored above their comparison score bands; in mathematics, tenth graders scored at the within their score band at the high end. In 1996, tenth graders scored within their comparison score bands in all subjects except social studies where they scored above the comparison score band.

Proficiency Levels

- Sophomores scoring in Level 1 and Below Level 1 in reading dropped from 51% in 1994 to 49% in 1996. The percent achieving Level 2 increased from 29% in 1994 to 30% in 1996. Twenty percent of the tenth graders scored in Level 3 or Level 4 in 1994, and 21% of the tenth graders scored in Levels 3 and 4 in 1996.
- In mathematics, 55% of the sophomores scored at Level 1 or Below Level 1. In 1996, 54% of the sophomores scored at Level 1 or Below Level 1. In 1994, 29% scored at Level 2 in Mathematics; in 1996, 28% scored at Level 2 in mathematics. Sixteen percent of the sophomores scored in the two highest levels in 1994 while 18% of the sophomores scored at Level 3 and Level 4 in 1996.
- In 1994, 52% of tenth graders scored at Level 1 or Below Level 1 in Science. In 1996, 53% of the sophomores scored there. Thirty-two percent of the tenth graders achieved Level 2 in 1994 while 31% achieved Level 2 in 1996. The percentage of students who scored in Level 3 or Level 4 remained at 17% in 1994 and in 1996.
- In social studies, 48% of the tenth graders scored at Level 1 or Below Level 1 in 1994 while in 1996, 50% of the sophomores scored in the two bottom levels. Students scoring in Level 2 decreased from 34% in 1994 to 28% in 1996. Students achieving the highest levels, Levels 3 and 4, increased from 19% in 1994 to 22% in 1996.



PARTICIPATION RATES

- In 1988, 52% of the bilingual fourth graders; 69% of the special needs fourth graders; and 99% of the regular education fourth graders were tested. In all, 92% of the fourth graders were tested. In 1996, 59% of the bilingual students were tested; 55% of the special needs students were tested; and 97% of the regular education fourth graders were tested. Ninety percent of all fourth graders were tested in 1996.
- In 1988, 30% of Brockton's bilingual eighth graders were tested; 47% of the special needs eighth graders were tested; and 97% of the regular education eighth graders were tested. Eighty-seven percent of all eighth graders were tested. In 1996, 34% of the bilingual population were tested and 37% of the special needs eighth graders were tested. Of the regular education eighth graders, 92% took the MEAP. In all, 83% of the eighth graders were tested.
- At grade 10 in 1994, 35% of the bilingual students were tested; 56% of the special education students were tested; and 84% of the regular education students were tested. In all, 75% of the tenth graders took the MEAP in 1994. In 1996, 59% of the bilingual students were tested; 70% of the special needs students were tested; and 74% of the regular education students were tested. In all, 73% of the tenth graders were tested.

GENERAL COMMENTS

- The scaled score performance for fourth grade students in Brockton remains stable showing no improvement across the five administrations of the MEAP. In all subjects, the 1996 score was lower than the 1988 score.
- The percentages of Brockton fourth graders scoring in the lowest proficiency levels have decreased in mathematics, science and social studies (the largest decrease is 10 percentage points in science); the percentage in the lowest levels in reading has stayed the same. The percentages at the highest proficiency levels, levels 3 and 4, have decreased slightly in all subject areas.
- The scaled score performance for eighth graders has decreased in all subject areas over the five administrations.
- The percentages of grade 8 students in Brockton who received proficiency level scores of Below Level 1 or Level 1 increased in mathematics and science, remained the same in social studies, and decreased in reading over the three administrations in which proficiency levels were reported. The percentages of students achieving proficiency levels 3 and 4 decreased over the three administrations in all subjects.
- The scaled scores for tenth graders decreased slightly in reading and social studies, remained the same in mathematics, and increased slightly in science over the two years of administration.

The first of the year was a very dry one, and the crops were much affected. The weather was very hot, and the crops were much affected. The first of the year was a very dry one, and the crops were much affected. The weather was very hot, and the crops were much affected.

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The eighth of the year was a very wet one, and the crops were much affected. The weather was very cold, and the crops were much affected. The eighth of the year was a very wet one, and the crops were much affected. The weather was very cold, and the crops were much affected.

- The percentages of tenth graders scoring in the two lowest proficiency levels decreased slightly in reading and mathematics and increased slightly in science and social studies over the two administrations. The percentages of tenth graders scoring in the highest proficiency levels (3 and 4) increased slightly in all subjects but science where it remained the same.

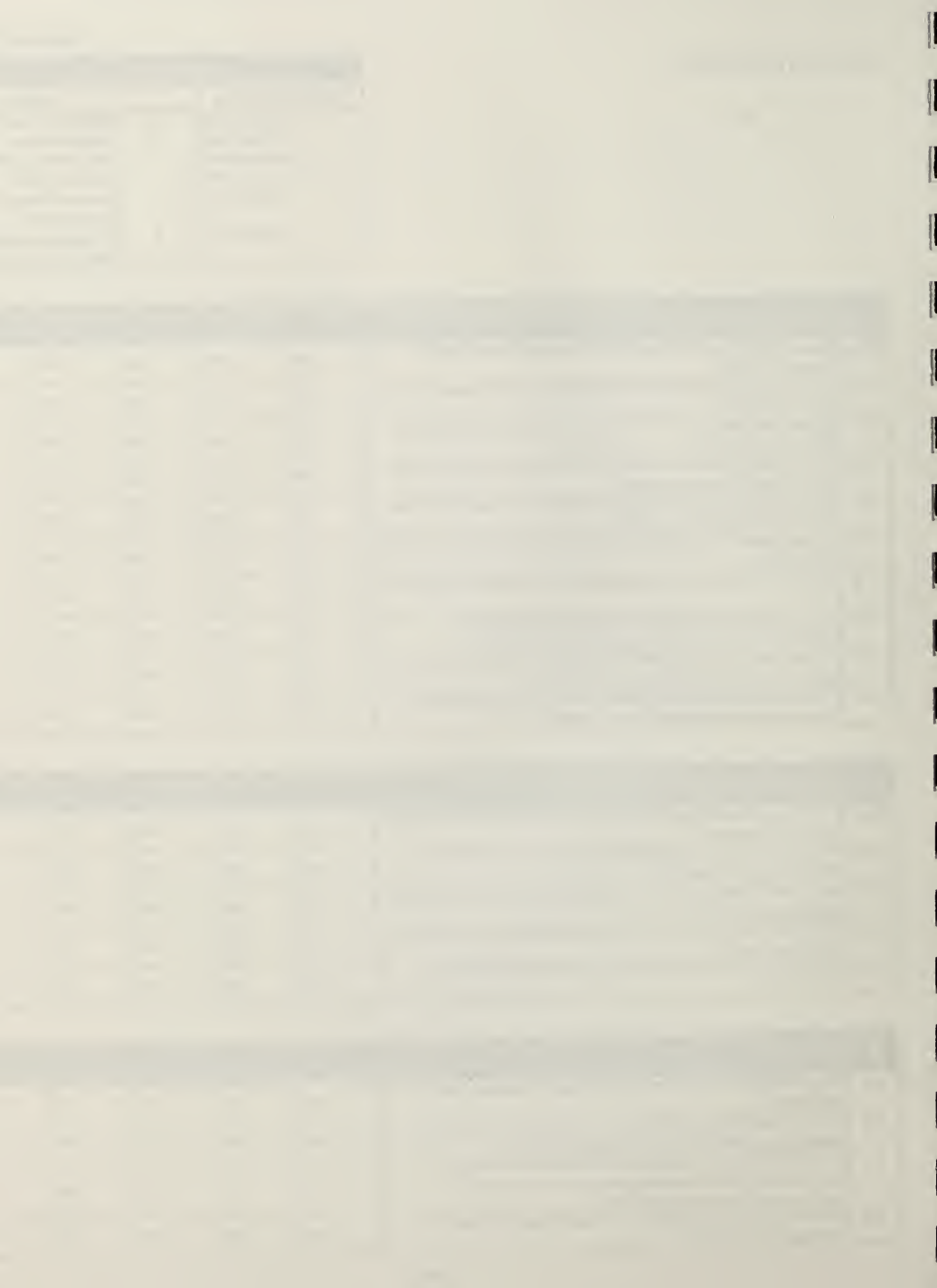
EMPLOYEE SURVEY

Rating Scale		
Yes/No Questions		Opinion
Definitely yes	1	Very good to excellent
Generally yes	2	Generally good
Not sure, one way or the other	3	OK - could be better, could be worse
Generally no	4	Not good, needs some improvement
Definitely no	5	Inadequate, needs major improvement

1 Education Reform		1	2	3	4	5
1.b.	Are you familiar with the issues of Education Reform, the Law passed in 1993?	28%	52%	12%	6%	2%
1.b.	Do you feel you have a good understanding of the purpose and the goals of the law?	21%	52%	15%	7%	2%
1.b.	Do you feel that there is a lot of confusion about what Education Reform is all about?	21%	34%	25%	15%	4%
1.d.	Do you feel the issues of Education Reform are considered when school district plans are made?	25%	40%	19%	12%	4%
1.e.	Do you feel the issues of Education Reform are considered when school-based plans are made?	29%	39%	20%	10%	3%
1.f.	In your opinion is the school district taking positive steps to improve education?	46%	37%	9%	5%	3%
1.g.	Do you feel your job has changed because of Education Reform?	37%	29%	14%	15%	6%
1.h.	Do you think there has been an improvement in student achievement in your school due to Education Reform?	5%	30%	40%	18%	7%
1.i.	Do you think the improvements in education at the school would have happened without Education Reform?	9%	23%	36%	24%	8%
1.j.	Have you perceived an increase in school funding tied directly to improvements in education in your district?	31%	36%	20%	9%	3%

2 Educational Goals and Objectives						
2.a.	Are the school administration's goals and objectives generally clear and understandable?	31%	44%	14%	8%	3%
2.b.	Are you clear about the school district's goals and objectives as they relate to your own job?	29%	43%	16%	9%	4%
2.c.	Are there indicators issued to measure progress toward goals and objectives generally?	16%	39%	30%	11%	3%
2.d.	Are there indicators used to measure your progress toward goals and objectives?	17%	38%	28%	13%	4%
2.e.	Do you have a role in developing these goals and objectives?	16%	34%	18%	22%	11%

3 Curriculum						
3.a.	Do you believe that your district's curriculum is coherent and sequential?	18%	47%	22%	8%	4%
3.b.	Do you believe that your curriculum is challenging and tiered to preparing students for life after secondary school?	18%	49%	22%	8%	4%
3.c.	Is there a coherent, on-going effort within the district to keep curriculum current with evolving trends and best practices in pedagogy and educational research?	21%	47%	20%	9%	3%
3.d.	Do teachers play an important role in reviewing and revising curriculum in the district?	18%	38%	23%	15%	6%



EMPLOYEE SURVEY

Rating Scale		
Yes/No Questions		Opinion
Definitely yes	1	Very good to excellent
Generally yes	2	Generally good
Not sure, one way or the other	3	OK - could be better, could be worse
Generally no	4	Not good, needs some improvement
Definitely no	5	Inadequate, needs major improvement

4 Planning

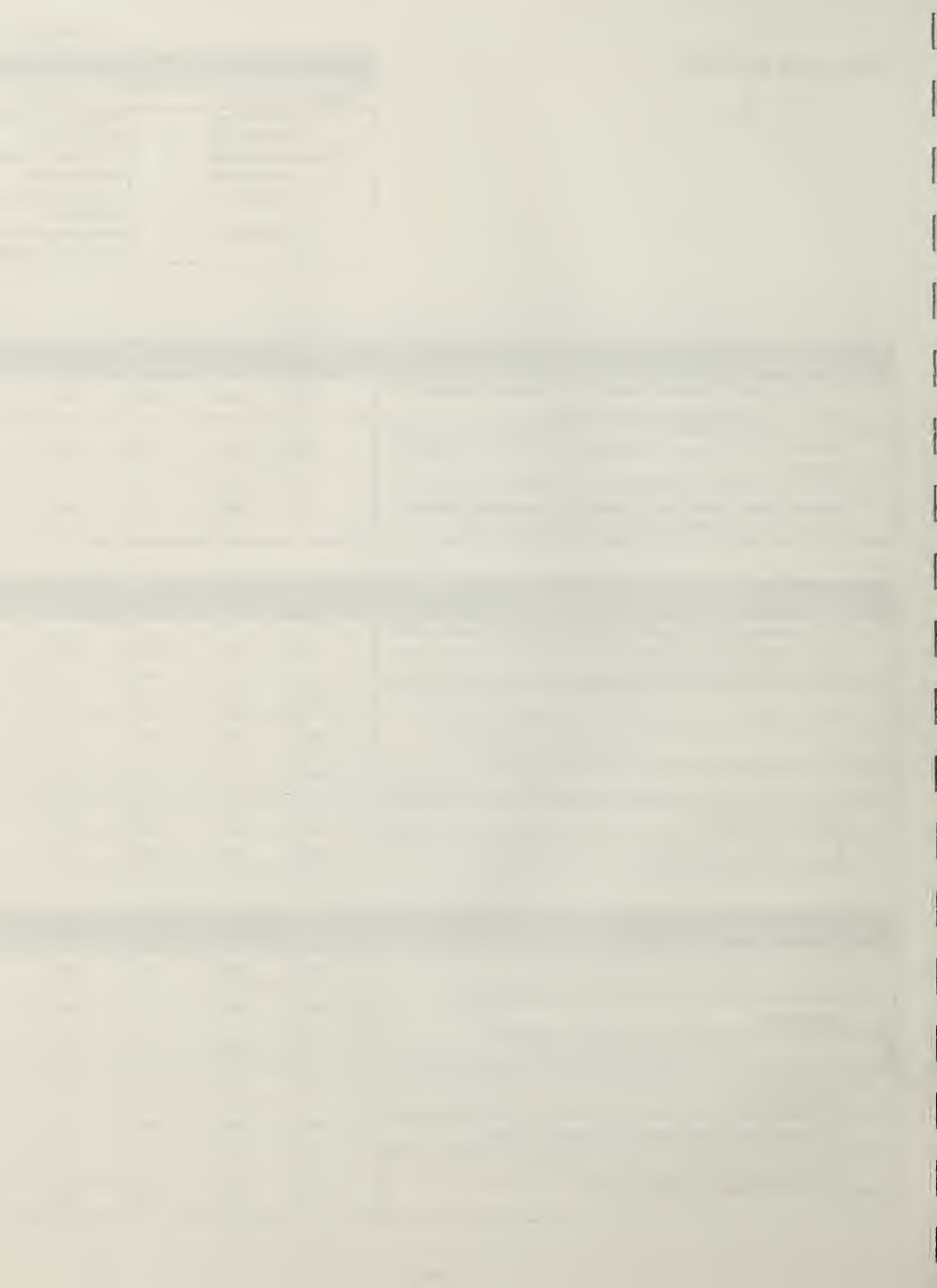
4.a.	Is the planning for important issues (e.g. curriculum, budgetary, etc.) within the district a top-down process?	27%	40%	23%	7%	3%
4.a.1.	If the answer is "Definitely yes" (1) or "Generally yes" (2), is there an important role for teachers and professional staff in the planning process?	14%	39%	25%	15%	6%
4.b.	If staff does not have an important role in developing plans, are decisions made by the central office/school committee explained so that you can understand the basis for the decision/policy?	6%	31%	37%	19%	7%

5 Communications and Mission Statement

5.a.	Is there adequate on-going communication between teachers and district administrators? In other words, do you think that you know what is going on in the district?	7%	31%	30%	21%	12%
5.b.	Is there adequate communication between you and your superiors?	25%	46%	12%	9%	7%
5.c.	Is there a mission statement in place for your school district?	58%	25%	14%	1%	2%
5.d.	Is there a mission statement in place for your school?	62%	22%	13%	1%	2%
5.e.	Does the mission statement define how the school is run, and how students are taught?	33%	35%	23%	6%	3%
5.f.	Are these mission statements applied in the operation of the school and the teaching of students?	28%	40%	25%	5%	3%

6 Budget Process

6.a.	Do you understand your school budget process?	20%	32%	17%	18%	13%
6.b.	Do you understand how the budget process impacts your department?	28%	32%	17%	14%	9%
6.c.	Is the school budgeting process fair and equitable?	8%	26%	42%	14%	11%
6.d.	Are budgetary needs solicited and adequately addressed in the budget process?	9%	29%	41%	13%	8%
6.e.	Once the budget is approved and implemented, does the allocation and use of funds match the publicly stated purposes?	14%	29%	48%	5%	4%
6.f.	Given the circumstances, the school department seems to be doing the best it can with in the school budget process.	14%	39%	34%	7%	6%
6.g.	Are there deficiencies in this process?	11%	25%	47%	14%	3%



EMPLOYEE SURVEY

Rating Scale		
Yes/No Questions		Opinion
Definitely yes	1	Very good to excellent
Generally yes	2	Generally good
Not sure, one way or the other	3	OK - could be better, could be worse
Generally no	4	Not good, needs some improvement
Definitely no	5	Inadequate, needs major improvement

7 Professional Development

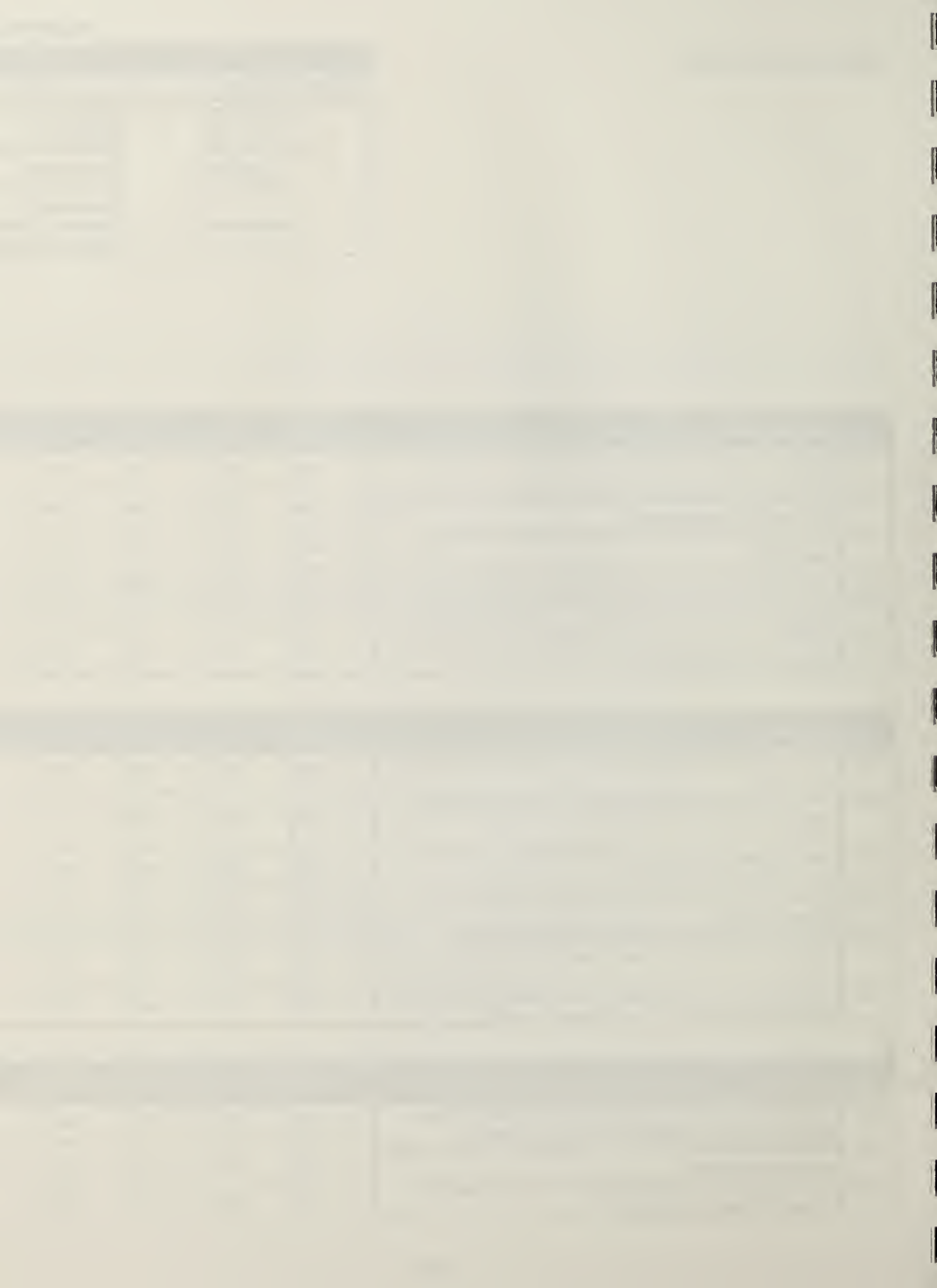
7.a.	Is there an adequate professional development program in your school?	30%	37%	11%	14%	7%
7.b.	Is the program designed to meet school needs and tied to the new frameworks and assessments?	28%	41%	17%	9%	5%
7.c.	Is the program designed to change the content of pedagogy in classrooms?	20%	37%	29%	9%	4%
7.d.	Are there deficiencies in the professional development program?	11%	28%	29%	25%	7%
7.e.	Did you participate in the professional development program in 1995/96?	52%	23%	7%	7%	10%
7.f.	Professional development is making a difference and will improve education in my school district.	30%	32%	24%	7%	7%

8 Supplies

8.a.	Have you generally received sufficient and appropriate supplies to do your job?	20%	43%	11%	15%	12%
8.b.	Have you generally received sufficient and appropriate basic educational supplies (e.g. chalk, paper, pens, pencils, etc.) to do your job?	32%	46%	10%	7%	6%
8.c.	Have you generally been supplied with a sufficient number of a current edition of textbooks?	19%	36%	15%	18%	12%
8.d.	Are students given a copy of these textbooks to keep at home during the year?	21%	34%	14%	15%	15%
8.e.	Have you generally been supplied with sufficient ancillary curriculum materials (e.g. current maps, lab supplies, videos, etc.)?	9%	40%	15%	23%	14%
8.f.	Is the process for obtaining supplies and materials effective, time sensitive and responsive to your classroom needs?	15%	41%	16%	20%	10%

9 Facilities

9.a.	How would you rate the overall state of school facilities (e.g. cleanliness, security, maintenance, structural integrity)?	13%	30%	22%	19%	16%
9.b.	How would you rate the overall state of classrooms, labs, and other teaching rooms/areas?	10%	33%	23%	23%	12%
9.c.	How would you rate the overall state of the common areas (e.g. hallways, stairwells, and cafeteria)?	13%	35%	22%	18%	12%



EMPLOYEE SURVEY

Rating Scale		
Yes/No Questions		Opinion
Definitely yes	1	Very good to excellent
Generally yes	2	Generally good
Not sure, one way or the other	3	OK - could be better, could be worse
Generally no	4	Not good, needs some improvement
Definitely no	5	Inadequate, needs major improvement

9.d.	How would you rate the overall state of the areas outside of the building (e.g. playgrounds, walk-ways and grounds)?	10%	30%	28%	22%	11%
9.e.	Would you agree with the following statement: "The school administration makes an effort to provide a clean and safe working environment."	28%	40%	14%	11%	8%

10 Computers and other Educational Technology						
10.a.	Are the usage of computers and other technological tools a significant part of the management practices at the school?	19%	38%	19%	19%	8%
10.b.	Are the usage of computers and other technological tools a significant part of the instructional practices at the school?	13%	28%	19%	27%	14%
10.c.	In terms of student usage, are computers generally available only in a computer laboratory setting or library/media center?	35%	38%	19%	19%	7%
10.d.	How many computers are located in your classroom?					
10.e.	Do you have a school computer provided for and dedicated for your usage?	22%	12%	7%	13%	46%
10.f.	Is there a school computer provided for and shared by you and other teachers?	17%	23%	11%	12%	37%
10.g.	Are there computers available for and used on a regular basis by students?	23%	29%	18%	18%	11%
10.h.	About how many minutes a week does each student use a computer? (Estimated) _____ min.					
10.i.	Is the number of available computers sufficient for the number of students?	6%	14%	17%	18%	45%
10.j.	Are the computers in good working order?	25%	29%	27%	9%	9%
10.k.	Are the software packages in the computers uniform and consistent with the instructional level to be provided?	21%	23%	33%	12%	11%



*BROCKTON PUBLIC SCHOOLS
BROCKTON, MASSACHUSETTS*

DEPARTMENT OF REVENUE REPORT

*SCHOOL DISTRICT PROGRESS AND
EDUCATIONAL REFORM SINCE 1993*

October, 1997

*DONALD BURGESS
INTERIM SUPERINTENDENT OF SCHOOLS*

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V. SUPERINTENDENT'S STATEMENT - EDUCATION REFORM

Dr. Donald Burgess
Interim Superintendent of Schools
Brockton Public Schools
Brockton, Massachusetts

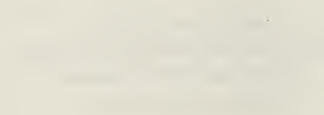
1. SCHOOL DISTRICT'S PROGRESS AND EDUCATION REFORM SINCE 1993

The Brockton Public Schools has utilized increased Education Reform Act of 1993 (ERA) funding to address issues of class size and increasing student enrollment, reinstitute programs, enhance instruction, expand professional development opportunities, update textbooks, library and instructional materials, and to provide the necessary learning environment by improving facilities to the extent possible.

Notable ERA achievements in the Brockton Public Schools

- Time and learning standards were reviewed and the necessary changes put into effect by lengthening and restructuring the school day, and by eliminating in-service half-days where appropriate. Contractual issues related to the time and learning standards have been resolved through negotiations and are part of the current teachers' agreement.
- A professional staff development plan has been implemented. The plan provides ongoing support for staff training in current initiatives, methodologies and school improvement goals, as well as providing opportunities for recertification. Teachers in every elementary school have received training in one or more alternative approaches to supplement the reading program. All school sites have PALMS-trained staff. Administrators, including principals, have received training in the areas of following due process requirements, dealing with harassment issues, understanding and using various applications of technology and techniques of evaluation.
- Curriculum study groups in each curriculum frameworks area have reviewed the district's curriculum offerings and have developed appropriate units and projects currently used in classrooms.
- A district strategic plan coordinating systemwide priorities and funding sources was developed and adopted by the School Committee.
- Performance standards and the evaluation instruments were modified to comply with standards and procedures promulgated by the Massachusetts Department of Education.
- Assessment has been tied to learning in individual school improvement projects such as Project Zero, First Steps, and the Accelerated Schools Model.
- Individual school councils were established and training provided for council members. All schools have school improvement plans which are reviewed by the School Committee.

THE HISTORY OF THE UNITED STATES



CHAPTER I. THE DISCOVERY OF AMERICA

THE first discovery of America was made by Christopher Columbus in 1492. He sailed from Spain in search of a westward route to the Indies, and after a long and perilous voyage, he landed on the island of San Salvador in the West Indies.

At this time, the continent of America was inhabited by numerous tribes of Indians, who lived in a state of nature and were engaged in agriculture and hunting.

The discovery of America opened up a new world of opportunity for the European powers, and soon after, other explorers followed in the footsteps of Columbus.

The first European settlement in America was founded by Juan Ponce de Leon in 1513. He established a colony on the island of San Juan, which is now the capital of Puerto Rico.

The discovery of America also led to the development of the transatlantic trade system, which connected the Americas with Europe and Africa.

The first English settlement in America was founded by John Rolfe in 1607. He established a colony on the James River in Virginia, which was the first permanent English settlement in the New World.

The discovery of America was a great event in the history of the world, and it led to the development of a new continent and a new way of life.

The first American president was George Washington, who was elected in 1789. He was the first President of the United States and served for two terms.

The first American war was the Revolutionary War, which was fought between the American colonies and Great Britain from 1775 to 1783.

The first American constitution was adopted in 1787. It was the first written constitution in the world and established the framework for the government of the United States.

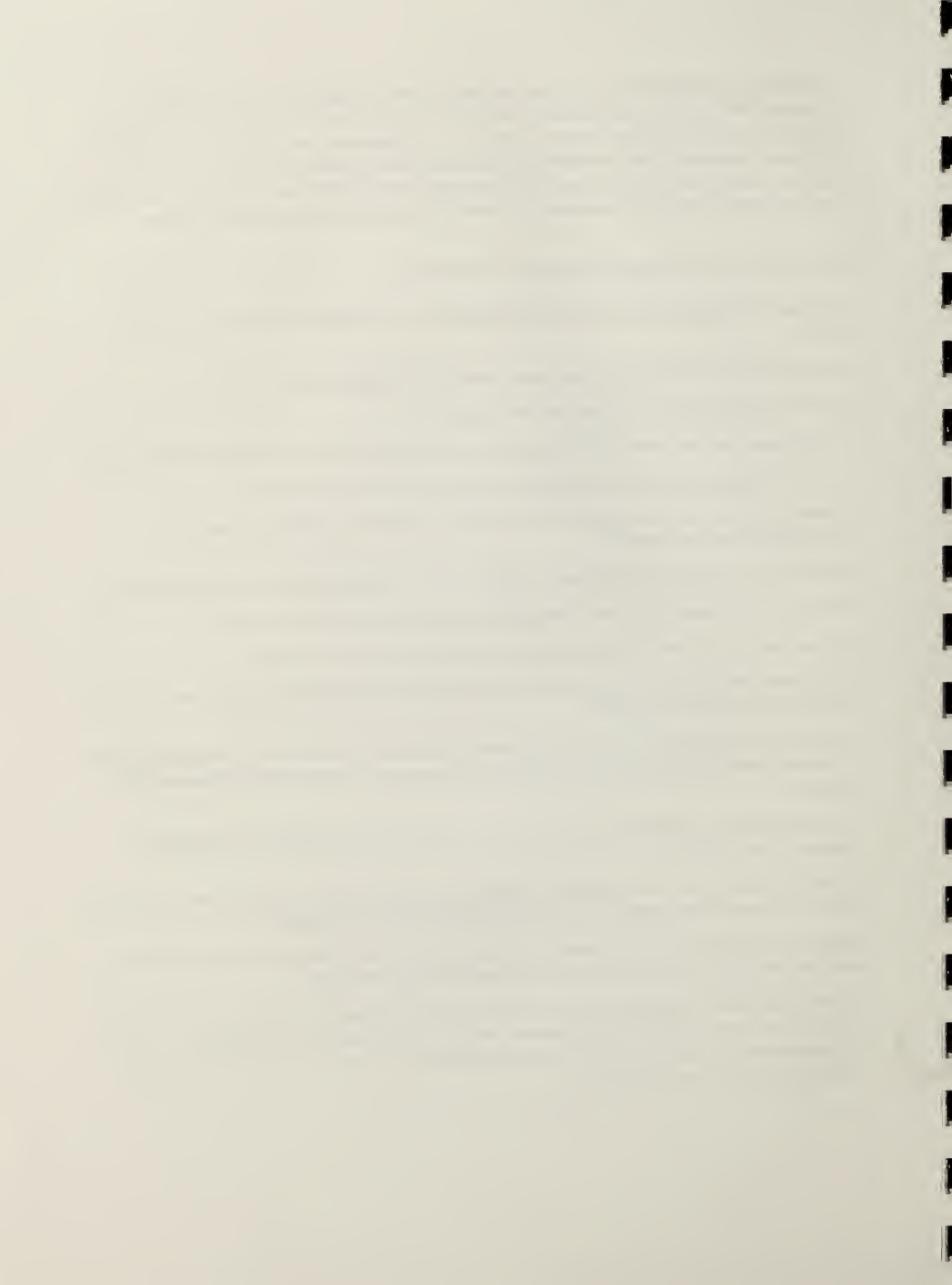
The first American census was taken in 1790. It was the first time that the population of the United States was counted, and it showed that there were about 3.9 million people living in the country.

The first American railroad was built in 1825. It was the Baltimore and Ohio Railroad, which connected Baltimore to Washington, D.C.

- A voluntary desegregation and educational equity plan was approved by the Board of Education and has been in place since April 1995. The plan features an assignment plan that provides parents with school choice, promotes racial balance in the district's schools, and provides mechanisms and processes for individual school improvement, parent information, and increasing staff diversity. The Education Reform Act of 1993 and the district's equity plan are seen as being mutually supportive in assisting the school system to meet its goals.

Projects initiated and programs restored or instituted

- Full-day kindergarten classes have been initiated for a small number of students on a pilot basis.
- A formal science program has been reintroduced at the primary level.
- The standardized testing program has been restored.
- A developmental and remedial reading program has been restored in the middle school grades.
- A world language program has been instituted for middle school students.
- Extensive school-to-career programs and business, community and higher education partnerships have been initiated.
- Networked computer labs have been installed at Brockton High school and all middle schools.
- Computer installations have been completed in all instructional resource centers.
- Instructional supply and textbook spending were increased by \$1.6 million.
- A five-year instructional technology plan was developed, received state approval and is now in its second year of implementation.
- A new student management information system is operational with Brockton being selected as a partner district for the implementation of the Massachusetts Department of Education MIS project.
- Construction has started on two new elementary schools; major repairs have been made to existing school buildings.
- A feasibility study with a ten-year plan for building construction and renovation based on space needs and the physical condition of existing buildings has been developed.
- High School graduation requirements have been reviewed with modifications being phased in over the next four years to accommodate changes in program structure.
- Outstanding issues of class size, combination classes and increasing enrollment were addressed by hiring additional staff, including teachers, nurses, monitor teacher assistants and paraprofessionals, leasing twenty-six modular classrooms and leasing three buildings with an additional twenty-seven classrooms.



2. BARRIERS TO EDUCATION REFORM

The goal of accommodating the school population in an appropriate learning environment has become increasingly difficult during the ERA years

- Brockton's enrollment had reached a thirty-year low in 1992 just prior to the passage of ERA legislation. Since then enrollment has risen by 15% in the five-year period between 1993 and 1997 and the trend of increasing enrollment shows no signs of abatement.
- Even as two new elementary schools are scheduled to come on line by January 1999, the additional instructional space the new schools will provide cannot keep pace with increased enrollment. As indicated earlier, the district is leasing space for a total of 60 instructional units; there are twenty-seven classrooms in three separate leased facilities in addition to the twenty-six modular classrooms located on school grounds at various sites. The funds for the leases has been budgeted by the School Committee as part of its net school spending thereby diminishing funds available for direct services to students.
- Within the next three years when school facility leases are no longer considered net school spending, providing for needed school space will require an additional outlay of local funds outside the normal School Committee appropriation. Brockton city officials anticipate that the city's fiscal capacity will be severely strained between the need to provide reasonable municipal services and the need to house its growing school population.
- The shortage of classroom space is even more evident when one examines the current utilization of space in most buildings. In many instances, non-standard classrooms which had not been intended for classroom instruction (art, music areas, for example) are being used as regular classrooms. Music and art instructors are often required to travel from room to room with their materials.
- Increased emphasis on technology-related education has created an additional demand for scarce dedicated space for the computer and multi-media centers or labs in all buildings.

The foundation budget model has not accounted for any number of unforeseen factors which have lessened the overall impact of the increase in Chapter 70 funding

- In Brockton, funding for major federal programs such as Title 1 decreased by approximately \$2M during the first three years of ERA. Since Title 1 provided essential classroom services it was necessary to offer comparable instructional services through local funding thus diminishing the impact of Chapter 70 funding.
- A four-year employment market shortage of special education therapeutic staff to provide mandated occupational and physical therapy services resulted in disproportionately large expenditures for contracted services in those specialty areas.
- Special education staff increased by nearly 35% in response to the need to provide other mandated special needs classroom instruction and services.

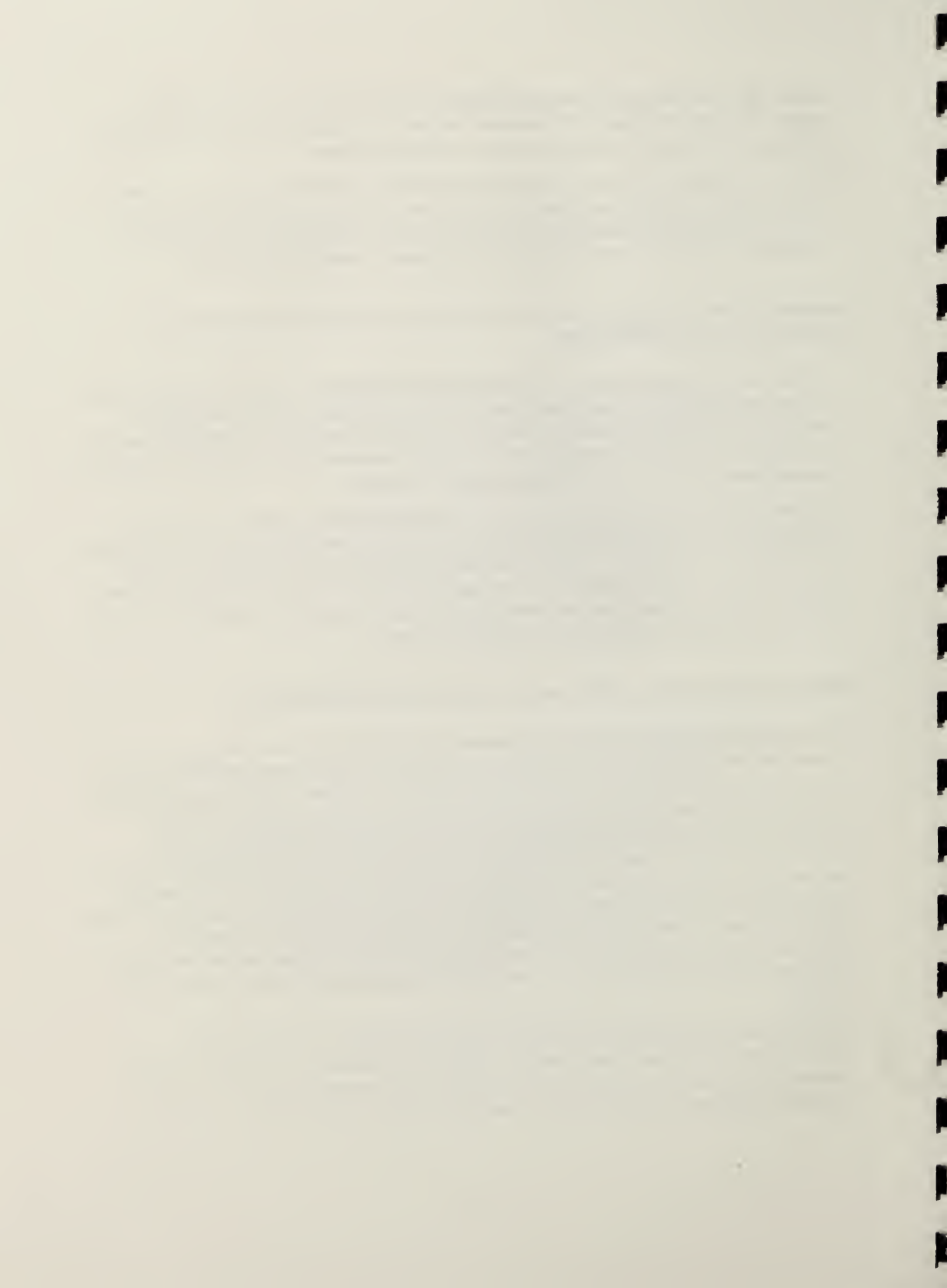
- Within the overall increase in the pupil population already cited, enrollment in bilingual education increased by nearly 27% between 1993 and 1997 requiring appropriate mandated staffing and services including provision for new language groups.
- Since 1993, Chapter 70 foundation budget formula has permitted the absorption of from \$5.5M to \$6M in local support through a reduction in local spending in excess of required municipal contribution and though an increase in already existing municipal expenditures reportable as net school spending outside of the School Committee appropriation.

Increasing student enrollment, major provisions and intent of ERA legislation are competing for the same ERA dollar

- In Brockton, the implementation of Time and Learning requirement for the 1997-1998 school year has been estimated to cost approximately \$4M. A large share of this cost has been attributed to the increased staffing to provide the necessary flexibility in student schedules for increasing time-on-task. Interestingly, the class size at Brockton High School, for example, will increase from 25 to 27 with 37 additional classroom teachers.
- In general, funds available during 1993 and 1997 has been used to maintain a previously attained class size. At the elementary level, for example, the average class size decreased from 28.0 in 1993 to 24.1 in 1997. The 24.1 was slightly less than the pre-Ed reform elementary average of 24.8 in 1990. Middle school average enrollment was 26.3 in 1993, 24.6 in 1997, but 22.3 in 1990. At the high school level the mean class size was 20.7 in 1990, 24.5 in 1993, 25.0 in 1997, and, as mentioned above, will be 27 in 1998.

Additional factors relating to local support outside of net school spending

- State legislation provides for 100% reimbursement for eligible home-to-school transportation--an obligation the legislature has not fully funded for more than fifteen years. In an urban environment, transportation of young children to and from school is great importance to parents. With transportation of private/parochial school, special education, vocational school tuitioned-out pupils, transportation to bilingual programs, and the adoption of a school-choice plan to reduce racial imbalance, annual costs for school transportation in FY98 will be approximately \$4M. The latter type of transportation is of particular importance not just simply from the racial balance or parent choice standpoint but because it can a significantly favorable impact on reducing school transiency rates. Over 95% of the transportation Brockton provides is eligible for 100% reimbursement. However, during the past year alone the reimbursement shortfall was approximately \$2M, bringing a total fifteen-year shortfall to \$16.8M.
- As a voluntarily desegregating community the City of Brockton is eligible for 90% reimbursement of its school capital projects. However, a feasibility study indicates that as much as \$250M may be necessary for a full-fledged facility improvement and construction program. Brockton's 10% share still represents a very serious fiscal burden.



3. PLANS OVER THE NEXT 3 TO 5 YEARS

The Brockton Public Schools looks forward to fulfilling its mission of providing high quality education that motivates students to excel, meets their individual needs, and prepares them for the future. Integral to this goal is the continuation of restored programs and new curriculum offerings; emphasis on increased student achievement; the ability to decrease class size while addressing increased student enrollment; and addressing instructional space needs.

Among other initiatives, it is imperative that Brockton begin to provide more early childhood education to more students at an earlier age. Presently less than 5% of its regular kindergarten population can participate in a full-day educational program and not enough 3-to-4-year-olds have access to Brockton's preschool program. Given the severe lack of instructional space, the likelihood of a substantial percentage of its early childhood population receiving a more appropriate early childhood education is truly problematic and requires creative problem-solving.

Completion of two new elementary magnet schools and construction of a citywide magnet school will provide students with innovative curricula offerings and educationally attractive programs. Each new facility will be equipped with the latest technology and will be accessible to the community as well as students.

The Brockton Public Schools will continue to implement goals identified in the district's strategic improvement plan, the voluntary desegregation and educational equity plan, the five-year instructional technology plan, and the professional development plan. Each of these plans support the initiatives of the Education Reform Act of 1993.

The success of Education Reform will be measured by a variety of benchmarks including increased academic achievement, lower dropout rates, improved student attendance, and expanded family and community involvement in the schools.

October 1, 1997

Brockton Public Schools



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December 19, 1997

TO: Dr. Donald Burgess
Superintendent of Schools (Interim)

FROM: Eligijus Suziedelis 
Administrative Assistant to the Superintendent

RE: *Response to the Education Management Accountability Board Draft Report -
December 1997*

The Brockton District Review was conducted under the auspices of the Education Management Accountability Board (EMAB) in compliance with Executive Order 393. Brockton and Lowell school districts are the second and third school systems to be reviewed under the executive order, following a similar review of the City of Malden conducted earlier this year. The audits are designed *"to review, investigate and report on the expenditures of funds by school districts consistent with the goals of improving student achievement."* Additionally, the report is expected to present *"a relevant summary of data to the EMAB for evaluation and comparison purposes."* The field review portion was conducted by a team of Department of Revenue auditors during August and September 1997. Auditors Brian Berry and Chesley Taylor, Jr., and auditor-in-charge Mark Tambascio conducted the review with great professionalism and consideration for the fact that the months of August and September are "prime time" for the planning and opening of schools.

This response focuses on some of the conclusions, judgments and interpretations in the draft report in the areas of --

1. Student achievement
2. Governance and management
3. Teachers, staffing, and time and learning
4. Teacher compensation
5. School Committee budget trends and expenditures
6. Foundation budget targets and expenditures
7. Student data and demographics
8. Technology and computers
9. Employee survey

1. STUDENT ACHIEVEMENT

Over five pages in the report are devoted to a narrative of Brockton's Massachusetts Educational Assessment Program (MEAP) with extensive commentary and comparisons by year, by grade level, by subject, by scaled scores and by measures of proficiency. Yet despite its length the commentary does not distinguish itself as being particularly analytical.

- ♦ There is no attempt to correlate the learning environment to student performance in the eight years during which the five MEAP administrations took place. We know that, in response to school funding, learning conditions--most importantly class size--fluctuated widely in some communities in response to school funding during the eight-year period. Nowhere was this more true than in the City of Brockton. Additionally, the process of aligning district programs with the state curriculum frameworks began with the approval of the frameworks in mathematics, science and technology in December 1995, only months before the last MEAP administration. Curriculum sequencing has considerable bearing on performance at the early grade levels. However, performance tends to "flatten out" over time for a given cohort of MEAP students as the cumulative effect regardless of sequencing makes itself felt. The need to synchronize instruction and assessment has been recognized in the creation of the new MCAS assessment instruments where assessment will be in alignment with the curriculum frameworks by design. The cumulative effect of instruction is particularly evident in the scaled scores of Brockton's 12th graders in 1988, 1990, 1992 when their MEAP achievement in all tested areas was no more than 50 points shy of the state's 1300 average target, remembering that differences of less than 50 points were not considered to have educational significance.
- ♦ The commentary relating to the performance of Brockton students spans five administrations of the MEAP in 1988, 1990, 1992, 1994, 1996 consisting of five cohorts, i.e. five distinct groups of students. The cohort-to-cohort comparison, a technique employed throughout the report for evaluating student performance over time, examines the performance of different groups at different points in time. While the technique is useful as a cursory, first-glance look at test results one would expect a more analytical examination. Unless a more analytical, longitudinal approach is taken, a simplistic cohort-to-cohort comparison would suggest that children born two, or four, or six, or eight years apart should perform better because they were born two, or four, or six, or eight years apart.
- ♦ It may be the intent of the report to show that infusion of ed reform funding in FY94 and FY95 should have made a difference in the MEAP'96 cohort's performance as compared to the performance of the MEAP'88 cohort. If that is the case, it would make sense to examine the fiscal context surrounding other cohorts as well. For example, it is matter of record that classes of MEAP'88 enjoyed five years of sustained Chapter 188 Education Improvement Act funding beginning in 1985. By contrast, MEAP'92, '94 and '96 students experienced the worst class sizes in Brockton's history and a totally disruptive 1991-92 school year, when the legislature appropriated Chapter 493 emergency funds to create an additional 81 classes for the midyear relief of intolerable learning conditions in Brockton. These conditions did not exist in every community.

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- ♦ A longitudinal examination of the report's *Chart 21A* MEAP proficiency scores and

Appendix C MEAP scores would indicate the following:

- In *Chart 21A* it is possible to trace the progress of a particular cohort. For example, even allowing for transiency, MEAP'90 4th graders and MEAP'94 8th graders represent the same cohort. These 8th graders, who had scored 1220 as 4th graders in 1990, achieved a score of 1280 in 1994. There are at least thirty-two such traceable longitudinal progressions in *Chart 21A*. In at least two-thirds of these cohort progressions, there were improvements in scores. In the twenty instances where it is possible to chart the progress of 4th graders through the eight and tenth grades in all subject areas, 85% of the time there was positive movement in their scores. This is at variance with the simple finding in *Appendix D: General Comments* that there is no improvement in fourth graders' scores across five administrations of the MEAP.
- In the same *Appendix D: General Comments* regarding fourth grade proficiency levels the report indicates that *"the percentage in the lowest levels in reading has stayed the same; the percentages at the highest proficiency levels, levels 3 and 4, have decreased slightly in all subject areas."* What the report fails to acknowledge by comparing only two different sets of fourth graders, is that when MEAP'92 4th graders took MEAP'96 in the eight grade the number of students at the lowest proficiency level decreased by 10% in reading and increased by 3% at level two and by 7% at levels three and four. Similar gains were recorded in the other three subject areas for the same MEAP'92 4th grade group by 1996.

2. GOVERNANCE AND MANAGEMENT

- ♦ The report's *Executive Summary* regarding governance and management contains a statement that *"the Education Reform Act removed principals from collective bargaining units in order to give superintendents more leverage in motivating the performance of principals."* The fact that principals are not entitled to collective bargaining is a matter of record (M.G.L, Chapter 71). The statute does not indicate why the legislature passed this provision. By contrast, the legislature is not shy in expressing its intent explicitly when it so chooses. In Chapter 70, Section 1 it is stated, for example, that *"It is the intention of the general court, subject to appropriation, to assure fair and equitable minimum per student funding..."* The report's opinion regarding the legislature's intent as it relates to principals might be interpreted as suggesting, for example, that assistant principals and other school administrative and supervisory personnel were not removed from collective bargaining units so that superintendents would not have the leverage in motivating their performance.
- ♦ The Education Reform Act of 1993 made a number of radical changes in the governance of schools. While the general court was deliberating and enacting school reform legislation, the Brockton School Committee was facing its most difficult negotiations with the teachers' bargaining unit. A settlement was reached in

November 1993 after an eleven-day teachers' strike. Principals, as members of the teachers' collective bargaining unit, began on one side of the negotiations table and, by virtue of the strike and ed reform legislation, ended on the other side. To get beyond the traumatic effects of the strike, the then-superintendent proposed, and the School Committee agreed to, individual compensation packages for principals comparable in percent increases to those of the rank and file. Individual contracts of up to three years (FY94- FY96) were issued to principals in view of the following considerations:

1. There was an existing system in place for the evaluation of principals.
2. It was understood that superintendent and principals were to begin the development of supplemental performance standards as part of future evaluation processes.
3. There would continue to be compensatory differentiation according to the size of a principal's building.

In July 1997 the School Committee approved a retroactive 3% cost-of-living FY97 adjustment for principals. The principals are in the process of negotiating their contracts FY98 and beyond.

The Brockton Public Schools has had a comprehensive system of evaluation of its instructional and administrative staff, including the evaluation of the superintendent of schools. Very few modifications to this system were necessary as the result of ed reform. A short-term lapse in the formal evaluation of principals occurred due to chronic high-level administrative understaffing in the central office, including fairly long periods of absences due to illness on the part of the superintendent. The school district has been operating without an assistant superintendency since 1992. A NESDEC organizational study completed in 1997 found central office administrative staffing grossly inadequate, recommending the creation of as many as eleven additional administrative positions.

3. TEACHERS, STAFFING AND TIME AND LEARNING

The report regards as positive Brockton's efforts to increase instructional staffing levels and reduce the student-teacher ratio. It must be noted that a number of competing Education Reform Act initiatives are not making this an easy task. For example, the implementation of Time and Learning standards and World Language requirements is expected to have a favorable longer term impact. For the present, however, the need to accommodate these Education Reform Act provisions, as well as increasing enrollment at all levels, has had a negative effect on class size. The report's *Chart 12* shows only a fractional improvement in elementary class size in 1996 over 1989 levels and considerable regression at the junior high and high school levels, from 22.3 to 24.5 and from 20.7 to 25.0, respectively. Even more recently at Brockton High School, for example, despite the addition of almost 20 staff members during the 1997-98 school year (FY98), academic department heads report that the average class size has increased from 25 to 27.

In relation to time and learning, the report notes that \$2.1 million is being expended in FY98 for increases in compensation. In addition to this increase which directly compensates teachers for the increase of the length of their workday, the school district is also expending \$1.7 million in additional staff and over \$100,000 in planning, scheduling and professional development to implement the necessary changes.

4. TEACHER COMPENSATION

In the *Executive Summary* the rate of inflation for the 3-year period FY94-96 is represented as 7.5% and the rise in average teacher salaries at 11%. The report makes the observation that teacher salaries rose faster than the rate of inflation, putting pressure on other accounts in the school budget. This conclusion overlooks the fact that in the year preceding FY94 the salary increase for teachers was zero. Assuming a rate of inflation for FY93 of 3%, we would obtain a 4-year inflation rate FY93-96 of approximately 10.5% and quite comparable to the rise in the average teacher's salary.

5. SCHOOL COMMITTEE BUDGET TRENDS AND EXPENDITURES

The comprehensiveness of the discussion of school finance and budget trends would benefit from the more consistent the use of constant dollars. *Section 6* and *Appendix A* multi-year budget comparisons are made without the use of the concept of constant dollars that had been introduced earlier. Constant dollars are also absent from SPED cost comparisons. In addition, the report fails to account for the substantial reductions in federal funding coinciding with the start of ed reform funding. The reduction in federal funds during the fiscal years 1994-96, had serious repercussions eroding a good portion of the gains in per pupil expenditures. Since the major part of Title 1 funding was used for remediation of basic skills with an emphasis on reading, approximately \$2 million in Title 1 dollars had to be replaced with ed reform dollars to guarantee the continuation of these vital services.

In general, the report does not establish the fiscal context just prior to ed reform funding and the city's fiscal crisis including a payless payday for its employees (the first such occurrence since the Depression), the lowest bond rating in the country, the formation of a Fiscal Control Board, the mid-year infusion of emergency aid, classrooms enrollments in 40's. If one is serious about the use of ed reform dollars and their responsible use, one needs to understand the exact starting point of ed reform in Brockton and the recovery and rebuilding process that had to take place.

6. FOUNDATION BUDGET TARGETS AND EXPENDITURES

M.G.L. Chapter 70, Section 9, does establish monitoring requirements for the categories of extraordinary maintenance, extended programming, professional development, books and instructional equipment, and administrative costs, with the stipulation that foundation budget targets need not be met but must be explained.

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The procedure for the filing of such explanations, as the report indicates, has not been clearly defined and should be revisited by the legislature. For example, the four target categories would have required a combined expenditure of approximately \$8.5M in FY95 and \$9.3M in FY96. Since Chapter 70 funding only increased by \$6.4M and \$9.0M in FY95 and FY96, respectively, "targeted" spending would have required spending 133% and 103% of the new Chapter 70 assistance, totally neglecting all other "non-target" sending categories including staffing for increased enrollment. *Chart 10a* depicts Brockton's foundation budget "target" spending. However, we believe the report uses the wrong base, i.e. 100% foundation budget amounts. For example, if in FY97 Brockton is being funded at 89% of the foundation budget, it is would be appropriate to gauge its target categories in net school spending against 89% foundation budget levels.

For all other categories, including most of those depicted in *Appendix B* graphs, M.G.L. Chapter 70, Section 8 expressly provides that "*except as required by General Law, each district may determine how to allocate any funds for the support of public schools without regard to the categories employed in calculating the foundation budget.*" There are, in fact, no foundation budget targets in any other category except those provided in Chapter 70, Section 9. Section 9 clearly shows that in the legislature's mind calculation of the foundation budget and school district's expenditures are not, are not intended to be, the same. Incidentally, the *Miscellaneous expenditures* which seem to draw attention to themselves are essentially DOE-sanctioned city costs which do not fit into any other category.

7. DEMOGRAPHICS AND STUDENT DATA

As the *Background section* in the *Executive Summary* was being written the most recent data for dropouts was not yet available. The dropout rate for FY97 is less than 5.4%, continuing a very positive trend. The rate is less than the benchmark being considered for non-performing schools, compares favorably to the rate of other urban areas and is reasonably close to the state average of 3+%. Additionally, the attendance rates for all levels within Brockton schools compare quite favorably both to state averages and those of most urban communities.

Additionally it should be noted that data relating to the city omits mention of recent economic trends charted by the U.S. Census Bureau. Demographic changes, particularly those affecting the vitality of a community, are important in making comparisons and drawing conclusions about school population vis-a-vis statewide averages. For these reasons it is noteworthy that:

1. The number of individuals below poverty levels *decreased by 2.5 percent at the state level and by 12 percent in the surrounding municipalities in Plymouth county* but the number of persons below the poverty line in Brockton increased by 6 percent.
2. Per capita income, adjusted for inflation, in Plymouth county and the state *increased at a rate 50 to 55 percent greater than in Brockton*; additionally, the increases were occurring from base income levels 14 to 20 percent below those at the county and state.

8. TECHNOLOGY AND COMPUTERS

The report states that computer technology in Brockton classrooms has been "*minimal over the past few years.*" The results of a questionnaire administered to seniors at Brockton High School in October 1997 would appear to offer proof to the contrary. The survey completed by over 300+ seniors in their English classes recorded an overwhelming 87% percent as being "comfortable" to "very comfortable" with computers. There were positive responses to questions such as "Have you ever taken a formal computer course?" "Have you used computers in other courses?", "Have you ever been required to pass in a paper which was created on a computer?" ranged from 71% to 82% . Of course, 95% "would like to see more computers available for student use."

A computerized student information management system created in response to the Brockton High School accreditation concerns will serve as the WAN/LAN backbone for all schools as the school district's instructional network as well. A state approved network plan, Round 2 technology grant funds received during FY97 and FCC's universal e-rate will be used to accelerate access to the instructional network for a greater number of students.

9. EMPLOYEE SURVEY

The employee survey has some serious deficiencies which need to be remedied. 1700 employee surveys were distributed; 400 responded. Although far-reaching conclusions are drawn from the survey there is no data regarding sample stratification, no cross-analysis for item validation, no distinction between total number of respondents and responses to individual questions, an ambiguous rating scale for both Yes/No and opinion-type questions, and no information about who responded. A rating of 4, for example, means both "Not good, needs some improvement" and also "Generally no." The apparent confusion regarding other questions of this type where an opinion is sought in a yes/no format is generally demonstrated by the symmetrical response distribution with high neutral responses.

It would have been advisable to employ opinion survey professionals to conduct in-depth interviews of a stratified and random sample of employees to take the place of, or, at the very least, to support/amplify/clarify any conclusions drawn from the written survey. Questions such as "Have you generally been supplied with sufficient ancillary curriculum materials?" is highly subjective since it can elicit totally different responses from individuals with exactly the same level of access to ancillary curriculum materials. The haphazard design of the survey make it less than valuable than it could have been.

Brockton Public Schools



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TO: Dr. Donald Burgess, Interim Superintendent of Schools

FROM: David H. Kimball, Senior Director, Administrative Services *DHK*

DATE: November 25, 1997

RE: Department of Revenue Report - Real Estate Leases

Reference is made to the Education Management Accountability Board Report (Draft #1) as prepared by the Department of Revenue. The auditors from the Department of Revenue reviewed two (2) real estate leases for St. Colman School and the Belmont Street School Properties. After review of their summary, I take no exception with any or all of their statements pertaining to the issues of these leases.

Thank you for your attention to this matter.

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DATE: November 25, 1997

RE: Department of Revenue Report - School Police Issue

Reference is made to the Education Management Accountability Board Report (Draft #1) as prepared by the Department of Revenue. Incorporated in the document are references to the Brockton School Police force in Section No. 17, Review of Expenditures. Specifically, the audit team cites that each School Police Officer is issued a 40 caliber "Glock" 22 with expanded magazine loaded with hollow point bullets.

The information presented by the audit is correct but I believe that further explanation is required. The Brockton School Police Officers carry the same weapon and use the same ammunition as the Brockton Police Department. The firearms and ammunition were recommended by the Brockton Police Department and Police Department officers trained our police force in the proper use of the "Glock" 22.

Officer Ronald Bourque, fire arms instructor for the Brockton Police Department, conducted a study regarding the copper jacket hollow point ammunition. The ammunition was found to be the safest type for an urban setting police force. The hollow point bullet is less likely to pass through an individual or hard surface as the bullet expands when striking an object. This bullet has greater stopping power, causing less rounds to be fired at a suspect. Finally, in addition to the organizing of firearms training of the Brockton School Police, Officer Bourque coordinates and instructs the School Department Police at the Police Department firing range up to four (4) times annually.

Thank you for your attention to this additional information

ACKNOWLEDGMENTS

This report was prepared by the Department of Revenue, Division of Local Services.

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The Division of Local Services would like to acknowledge the professional cooperation extended to the audit team by the Department of Education, as well as Brockton Interim School Superintendent Dr. Donald Burgess and the entire school department staff.

